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Race Restrictive Housing Covenants

By ROBERT C. WEAVER*

I. Negro Occupancy and Neighborhood Structure

THE rapid influx of Negroes into industrial centers during the first World War and its aftermath was associated with physical and neighborhood blight in areas where these new industrial workers were concentrated. While there is far from agreement as to the initial influence of this "invasion" upon property values,[1] there can be no doubt of the physical decay which occurred. In every instance, the pressure of mounting populations upon a limited supply of housing resulted in overcrowding, conversions, and excessive wear and tear. It was inevitable that rents per unit would rise, and it was no less inevitable that the life of the buildings would be shortened. This, of course, is an old, established process. It occurs whenever a neighborhood is occupied successively by families of low income. In the case of the Negro, there is an artificial restriction of the number of housing units available for his occupancy, and the process is accelerated and intensified.

This rapid deterioration of the neighborhoods has become associated with racial characteristics. As a matter of fact, it is a process which occurs regardless of race or color.[2] But the majority of citizens expect the occupancy of property by Negroes to occasion inevitable physical decay, neighborhood deterioration, and decline in property values. People do not stop to recall that

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The writer has benefited from suggestions by Dr. Charles S. Johnson of Fisk University and Miss Corienne K. Robinson of the Federal Public Housing Agency. He has also received many helpful criticisms from the editors of this *Journal*.

[1] In many cases the initial sale of property to Negroes involves a large profit for real estate operators and owners. This follows from the extreme demand for *any* housing for Negroes and from the constantly limited supply. When property is rented to Negroes, it usually yields a higher return because, despite the general low economic level of Negroes, their need for housing is so great that they double up and often pay more per unit than their white predecessors. When the influx of Negroes is not too great and a few come into a neighborhood with the resulting departure of many whites, values fall. This, however, may be a temporary situation in instances where the Negro population is growing. See Gunnar Myrdal, *An American Dilemma* (New York: Harper and Brothers, 1944), p. 623.

[2] Homer Hoyt, *The Structure and Growth of Residential Neighborhoods in American Cities* (Washington: Federal Housing Administration, 1939), p. 120.

in the same cities where Negroes are now restricted generally to ghettos, they once lived in many areas and their presence did not give rise to the results which are expected today. Nor are they impressed by the instances where there are a few Negroes in an area and where whites remain without loss in property values or blight to the neighborhood.

As a result of the general beliefs about Negro occupancy, an elaborate and extensive system of race restrictive covenants has arisen. These are compacts entered into by a group of property owners and real estate operators in a given neighborhood who have agreed not to sell, rent, lease, or otherwise convey their property to colored people for a definite period unless all agree to the transaction.[3] There are two motivating forces behind the spread of these covenants: race prejudice and interest in property values. From the point of view of democratic ideals, race prejudice is a danger to American cities. Certainly it is not a valid basis for a socially undesirable institution, and the restriction of colored citizens to limited areas has extremely unsocial results for the masses of Negroes and for our cities. Myrdal has described the current situation as follows:

"Segregation has little effect on the great bulk of poor Negroes except to overcrowd them and increase housing costs, since their poverty and common needs would separate them voluntarily from the whites, just as any European immigrant group is separated. The presence of a small scattering of upper and middle class Negroes in a white neighborhood would not cause conflict (unless certain whites were deliberately out to make it a cause of conflict), and might serve to better race relations. The fact is neglected by the whites that there exists a Negro upper and middle class who are searching for decent homes and who, if they were not shunned by the whites, would contribute to property values in a neighborhood rather than cause them to deteriorate. The socially more serious effect of having segregation, however, is not to force this tiny group of middle and upper class Negroes to live among their own group, but to lay the Negro masses open to exploitation and to drive down their housing standards even below what otherwise would be economically possible."[4]

The mass influx of Negroes into many neighborhoods has caused, and will cause, physical deterioration. This is, in itself, a by-product of restrictions on the areas in which Negroes can live. As a result of these restrictions, there are extreme pressures for colored people to find shelter. When a new area is opened to them, they rush in and the process described above takes place. *Race restrictive covenants, however, have not prevented and cannot prevent the expansion of the living space for mounting Negro populations.*[5] They delay this movement, make this final break-through almost a rout, and create vested interest on the part of present occupants to keep Negroes out.

The primary causes for blight and a decline in property values are not racial: they are economic. Many of the areas into which Negroes move are already blighted.[6] Groups of low and uncertain earning power cannot pay rents above a certain level. When there is no available housing designed to meet their needs, they move into any structures which are open to them. Where these are large, old buildings, the new occupants double up, take in roomers, engage in questionable practices, and often receive the un-

[3] Richard Sterner, *The Negro's Share* (New York: Harper and Brothers, 1943), p. 207.

[4] Myrdal, *op. cit.*, p. 625.

[5] "But in spite of white vigilance on the frontiers of the Negro districts, the line never gets absolutely fixed in all directions. Now and then a small break occurs, and the Negro community gains a little more space." *Ibid.*, p. 624.

[6] One of the authorities on land economics assigns the following causes to the fall in land values incident to racial and national movements: (1) low-income and slum standards of living of groups, (2) irrational race prejudice, (3) general exodus of former residents, (4) movement into old areas where there was already deterioration, (5) physical surroundings of area. Homer Hoyt, *One Hundred Years of Land Values in Chicago* (Chicago: The University of Chicago Press, 1933), pp. 314-16.

desirable elements from other races who have lost face in their own group. Owners and managers of these properties have little impetus for maintaining them since usually the demand for any type of housing open to Negroes far exceeds the supply; competitive maintenance standards are eliminated as a factor in attracting and holding rental occupants. The longer additional low-rent housing units are kept inaccessible to any group in the population, the greater their push and the more rapid their general influx into high-rent neighborhoods.

As Negro populations have grown in our industrial centers in the North, restrictions hemming them in have become tighter and tighter. The most complete system of race restrictions is in districts adjacent to existing Negro neighborhoods. These districts may be made up of houses now occupied by low-income families or they may be composed of dwellings occupied by middle-class whites. In the present situation, the cessation of new construction in America (except to house war workers) has created a general housing shortage. The usual process of draining off present occupants in the areas surrounding the Negro districts has stopped. Hence, there are no vacancies and no economic incentives for present occupants to move out. Owners, too, are without an economic urge to change racial occupancy, since OPA has generally frozen rents. The net result is a tightening of restrictions and the creation of a fetish for maintaining and strengthening racial covenants. Such agreements give a sense of false security to their signers at a time when there are no vacancies and practically no new construction. It is the economic pressure of no vacancies rather than the agreements which offers the principal protection to high-rent neighborhoods during the current war.

But this is a temporary situation. As soon as materials are released and construction revived there will be other places available to the present occupants of areas adjacent to Negro homes. Many of the present occupants will move, some because of their fear of ultimate Negro encroachment, more because of the desirability of new and better homes. The result will be vacancies, lower rentals, and a decline in values.[7]

At the same time, there will be little new construction for Negroes[8] and their need for housing will become relatively greater than that of any other element in the population; they will pay more per unit than any other potential tenant. The profit urge will permit racial covenants to be broken here and there, and it will prevent the renewal of racial covenants which will lapse in the near future.

In low rental neighborhoods, the pressure of potential Negro renters will be great and the mass movement of Negroes

[7] This process, which is not peculiar to areas occupied by Negroes, has been fully described elsewhere: "Forces constantly and steadily at work are causing a deterioration in existing neighborhoods. A neighborhood composed of new houses in the latest modern style, all owned by young married couples with children, is at its apex. . . . The houses, being in the newest and most popular style, do not suffer from the competition of any superior house in the same price range, and they are marketable at approximately their reproduction cost under normal conditions.

"Both the buildings and the people are always growing older. Physical depreciation of structures and the aging of families constantly are lessening the vital powers of the neighborhood . . . This steady process of deterioration is hastened by obsolescence; a new and more modern type of structure relegates these structures to the second rank. The older residents do not fight so strenuously to keep out inharmonious forces. A lower income class succeeds the original occupants. Owner occupancy declines as the first owners sell out or move away or lose their homes by foreclosure. There is often a sudden decline in value due to a sharp transition in the character of the neighborhood or to a period of depression in the real estate cycle." Hoyt, *The Structure and Growth of Residential Neighborhoods in American Cities*, p. 121.

[8] That is to say, judging from the past, private initiative will do little building for Negro occupancy. Even when it is willing to make an investment, it cannot find sites. The principal hope for new construction for the Negro has been—and apparently will continue to be—public housing projects. In industrial cities it is difficult to find vacant cites for these projects also.

into many of these areas will be inevitable. Racial covenants, in addition to delaying it, will lead to extreme activity on the part of present occupants to preserve the racial composition of the area. The iron band against Negro occupancy will be moved back a little farther where it will be challenged ultimately by the same pressures.

Where adjacent areas are of a higher rent character, the process will be delayed and may be postponed for a period of time, depending in length upon developments elsewhere in the city. Here and there, a break-through will occur. It will be fought. But there is every reason to believe that, as the structures become older and less desirable, the restrictions will finally give way. When they do, the old pattern of occupancy with its attendant results will occur. If, however, there is an adequate supply of low-rent housing units adapted to the income and family composition of the masses of Negroes, fewer colored families will move into the high-rent areas where the size and high rental of existing structures necessitate overcrowding.[9]

As a city develops, the patterns of its neighborhoods and land use change. The speed with which this process takes place usually varies with the rate of population growth.[10] While population changes have furnished the background in which such shifts take place, the rate of new construction has been an even more important factor in facilitating these changes. "The added population causes a pressure for space, a rise in rents, and an increase in building. But the effect of its entry is not confined to a mere quantitative change in building supply; it also causes qualitative neighborhood changes."[11]

War production has required large movements of workers into American cities; at the same time it has delayed the construction which would normally follow. This means that when materials are released there will be extreme activity in home building. The normal trend toward neighborhood change will be accelerated and with it the movement of families from older houses to newer places will be initiated. The availability of newer houses with the latest modern equipment will push all existing structures down in the scale of desirability.[12] At the same time, the most pressing demand for these "less desirable" houses will often come from the Negroes whose present needs for shelter are most acute.

II. Negro Housing in Chicago

The expansion of housing facilities available to Negroes in northern urban centers follows a fairly well-established pattern. It varies from place to place in specific details, but its over-all features are rather universal. The most striking examples of this process are found in cities where there are sizeable Negro populations and where in-migration has been rapid and concentrated. Chicago is one such city; it is especially significant for this analysis since there are current, as well as World-War-I data for it.

Negroes have lived in Chicago since the city's incorporation, and prior to World War I they were fairly widely distributed geographically. When, after 1910, the city began to grow rapidly Negroes were not able to get into new areas which were opened up to residential use. "The South Side area—largest in 1910—has expanded enormously in a thin strip, which has come to be known as Chicago's 'Black Belt,' and the other areas have also expanded

[9] Myrdal, *op. cit.*, p. 623.

[10] Homer Hoyt, *The Structure and Growth of Residential Neighborhoods in American Cities*, p. 81.

[11] *Ibid.*, p. 82.

[12] *Ibid.*, p. 122.

slightly, but no new areas within the city proper have been open to Negroes."[13]

Myrdal has described the process in Chicago as follows:

"The history of the expansion of the Chicago South Side Black Belt has exhibited the full gamut of Negro housing problems. The constant immigration of Southern Negroes into this segregated area caused doubling-up of families, the taking in of lodgers, the conversion of once spacious homes and apartments into tiny flats, the crowding of an entire family into a single room, the rapid raising of rents, the use of buildings which should be condemned . . . Light industry, wholesale commercial establishments, gambling and vice resorts have been pressing the poorer Negroes southward from the direction of the downtown area. The holding of land for speculation, the high cost of building, the lack of capital have left huge gaps of vacant land in the midst of the most over-crowded Negro areas in the northern half of the Black Belt. The west boundary of the section is sharply delineated by a series of railroad tracks which cut off the Negroes from their poorer white neighbors. The southward expansion has been marked by bitter conflict between the dispossessed whites and the harrassed Negroes. Organizations have been set up to prevent any white owners from selling or renting to Negroes; Negroes who succeeded in getting a foothold, or whites who seemed inclined to give them one for large sums of money, were terrorized and physically maltreated; bitter fear and hatred has marked many of the other contacts between whites and Negroes because of the whites' beliefs that the Negroes were dangerous to their persons and property. There has been practically no expansion to the east despite all Negro pressures and needs. The housing difficulties of the Negroes in Chicago are apparent at every point, and yet neither the City Council nor any other white groups have been willing to do anything about it."[14]

At the present, however, something has to be done about this problem. Chicago has been an area of racial tension for the past few years and it is generally admitted that there can be no permanent easement of this tension until something fundamental is done about the housing of Negroes in the city. In its simplest terms, it is the old, old problem of finding more space in which Negroes can live. Of course, there are matters of slum clearance, reclamation of blighted areas, and enforcement of health and sanitary codes; but all of these proposals are dependent upon finding places in which the overcrowded Negro population can be drained off temporarily and permanently. The need is manifest. The method of achieving it with the minimum of difficulty is not clear. But there are some leads.

The Chicago Plan Commission recently prepared a memorandum on the *Population in the South Side Negro Area.*[15] In 1939 the main South Side Negro area had 252,201 persons living in 4.2 square miles. The Plan Commission observes that such " . . . a density is more than is desirable were the area occupied entirely by three-story walk-up apartments, whereas much of it is taken up with smaller structures." According to the Chicago Residential Land Use Plan, this area had an excess population of about 87,300 persons. Even if it had been built up to the maximum, with a density of 50,000 per square mile, there would have been an excess population of 16,200. The commission concludes: "By either method of attaining a desirable density in the main South Side Negro area, there would be an excess population which would have to be provided for elsewhere."[16] There are two other South Side areas now largely occupied by Negroes and surrounded by vacant land adaptable to residential development. These areas, if built up with single-family homes, as their location would suggest, could house 12,000 persons per gross square mile, and the total land available in them would accommodate

[13] Myrdal, *op. cit.*, pp. 1126-27.

[14] *Ibid.*, p. 1127.

[15] Memorandum of July 6, 1943, transmitted by Miss Wattman, Secretary to H. Evert Kincaid, to Miss Elizabeth Wood of the Chicago Housing Authority.

[16] *Ibid.*

37,200 persons. If, through a combination of single-family homes and group houses, these areas were developed at a density of 15,000 per gross square mile, 40,000 could be housed in them.

There are several other areas of Negro occupancy in Chicago. All are small and all have excessive populations. It is extremely doubtful if the Negro population of 1939 could have been housed in the existing Negro areas without involving higher densities than are desirable. Also, it must be remembered that the two outlying areas on the South Side are only theoretically open to Negro occupancy. Recent plans for locating public and private housing projects in them have met violent opposition from whites who have come to feel that they have vested interests even in vacant land contiguous to their homes. In addition, some 70,000 more Negroes have come into Chicago since 1939. They are chiefly concentrated in the main South Side Negro section and they have added to the pressure and over-crowding in this and other areas open to Negroes.

Since this large migration has occurred there has been practically no expansion of the supply of housing open to Negroes. On the contrary, there has been a rapid extension of race restrictive covenants. In Park Manor, for example, the Improvement Association has had a second racial covenant executed by such property owners in the district as did not sign the first one. The association reports that, in the 104 blocks it covers, the property is practically 100 per cent restricted against Negro occupancy. There is a public housing project under construction far south,[17] a private development under construction in one of the South Side "Negro areas," and a public housing project planned in the same area.

Statistics can be and often are misleading. Although the figures quoted above indicate the need for new areas and new housing units for Negroes, they do not reflect the whole picture nor the true size of the problem. Plans for rehabilitating the South Side must involve the demolition and complete renovation of many buildings which are now occupied. If there is to be an effective job in this regard, it will have to be done on a large scale, preferably in large units at a time, for "a new building on any small parcel of blighted land would lose much of its value immediately upon completion because of the adverse surroundings."[18] The enforcement of health and sanitary codes, too, will require additional demolition. While any such programs are under way, present occupants, many of whom are now living almost on top of one another, will have to find some place to live. This means that any real rehabilitation of the inlying Negro areas will create an additional demand for more space and more houses for Negroes.

Already the pressure of the mounting Negro population has led to the movement of colored people into new areas. In one instance, they have gone into a run-down building on the West Side; in another, they have moved into an old area on the near Northwest Side and have been abused by their Italian neighbors. In still another instance, they were moved into a building which was leased from a bank; this building was covered by a race restrictive covenant and the bank has gone to court to get possession. Because there was no place for the colored families to move, the court stayed their eviction; it also avoided

[17] Although this was a vacant area, white residents, blocks away from it, protested vigorously against a project which would include a large proportion of Negro families.

[18] Chicago Plan Commission, *Master Plan of Residential Land Use of Chicago* (Chicago: The Chicago Plan Commission, 1943), p. 81.

a decision on the legality of racial restrictions. There were, in the early spring of 1944, evidences that the pressure of numbers and the pressure of economic motivation are again forcing the Negro to break out of the existing ghetto. There is no indication, however, that the move will do more than create another ghetto or an extension of the old one. Save for the three projects noted above, no steps have been taken to open additional areas for the swelling Negro population.

The present situation had many parallels just prior to the race riot in Chicago after World War I:

"Practically no new building had been done in the city during the war, and it was a physical impossibility for a doubled Negro population to live in the space occupied in 1915. Negroes spread out of what had been known as the 'Black Belt' into neighborhoods near by which had been exclusively white. This movement . . . developed friction, so much so that in the 'invaded' neighborhoods bombs were thrown at the houses of Negroes who had moved in . . . From July 1, 1917, to July 27, 1919, the day the riot began, twenty-four such bombs had been thrown."[19]

III. Negro Occupancy and Property Values

The primary need of the Negro community in industrial centers is more housing. Since this community is made up predominantly of low-income workers, the bulk of this housing should be designed to meet the needs and pocketbooks of families with limited earnings. If such housing is not available, Negroes will be forced to move into older structures poorly designed for occupancy by people of their general economic level. This will mean that there will be more conversions, more doubling up, and greater physical deterioration. On the other hand, when properly designed and managed housing is provided for low-income groups (regardless of their race), it can be and is maintained according to accepted standards. Only recently has the urban Negro dweller had a chance to prove his response to such housing. But competent observers admit that in the public housing projects constructed in the past few years, the Negro is proving to be a good tenant and a good neighbor.

The units made available to colored families under this program often represent the first well-designed, new housing which they have enjoyed on anything approaching group, as opposed to isolated individual occupancy. Already there is a body of evidence which indicates that Negroes *with steady incomes* who are given the opportunity to live in new and decent homes " . . . instead of displaying any 'natural' characteristics to destroy property have, if anything, reacted better towards these new environments than any other groups of similar income." Colored tenants have also displayed desirable rent-paying habits when housed in structures designed to meet their rent-paying ability. For 155 projects in 59 cities having two or more FPHA-aided projects, at least one of which is occupied by Negro tenants, the following results are reported: Collection losses do not exceed one per cent of the total operating incomes for a total of 142 of these projects, 72 of which are occupied by Negroes and 70 by white or other tenants. Five of the 13 projects showing rental losses in excess of one per cent are tenanted by Negroes and 8 are tenanted by whites or others. The collection loss records between the two racial groups do not differ more than one per cent in 51 of the 59 cities, and the records are identical in 34.[20]

[19] Charles S. Johnson, *The Negro in Chicago* (Chicago: The University of Chicago Press, 1922), p. 3. For a more dramatic story of the part housing played in the race riot of 1919, see Dorsha B. Hayes, *Chicago* (New York: Julian Messner, Inc., 1944), pp. 259-60.

[20] The quotation and statements relative to the experience of Negroes in public housing are supplied by Frank S. Horne, Chief, Race Relations Office, Federal Public Housing Authority, in a letter addressed to the present writer.

Although private builders have not generally developed large numbers of houses for Negro occupancy, their experience in recent years affords some pertinent evidence. The FHA has recently stated that, "our experience with Negro mortgagors has been good, and on the basis of credit analysis we consider them as good or better risk than white mortgagors.[21] Many FHA insured, and otherwise financed houses have been constructed on sites contiguous to public housing projects. Field investigations by the writer in a score of cities have shown that these new houses are uniformly well kept. They have usually taken on the neighborhood characteristics of maintenance which typify public housing projects. Despite these developments, public as well as private efforts have encountered much resistance incident to finding sites for Negro occupancy even in instances where the new projects are planned for vacant areas.[22]

There are no conclusive studies on the influence of Negro occupancy upon property values. There is, however, strong evidence in everyday observations to support Moron's contention that "smart real estate dealers have encouraged Negroes to move into old white neighborhoods where property values had begun to decrease. In the change of settlement the same houses automatically acquire a higher resale value or command higher rentals; while, in the case of rent property, the assessed valuation for tax purposes continues to decrease as if there had been no reversal of the income trend."[23] Certainly during the transitional period many of the white owners are encouraged to sell by the lure of higher prices than are current for similar properties in other sections of the city, and investors often turn to Negro occupancy in order to halt temporarily the natural decline in income and values.

Because private builders have generally failed to provide new housing to meet the needs of upper and middle class Negroes, these groups have been forced to go into existing structures. The owners in a transitional area have a monopoly on the available supply; this means that many Negroes buy homes simply because that is the only way they can get decent housing. It also means that the selling price is usually above the market value *prior to Negro occupancy.* It is inevitable that after the transition is made the value will decline in accordance with the trends in property values in the particular area. It is also inevitable that many of the new buyers will find it difficult to maintain old structures on which they are contracted to pay an extremely large proportion of their earnings. In American cities the Negro has become a handy dumping-ground for obsolescent property. There is a psychological factor—an evidence at times of conspicuous consumption—in this, for the higher income Negro family often proudly moves into areas where property is being abandoned because it no longer meets modern needs. These families usually pay excessive prices for houses which have become obsolete because of changes in the size of families of certain classes or because of changes in living habits.

Equally important as the observations made above is the influence of the Negro's economic status upon the value

[21] Statement of the Deputy Commissioner of the FHA quoted June 21, 1944 at Louisville, Ky., by Booker T. McGraw, Principal Housing Analyst, NHA, in a speech to the Negro Insurance Association.

[22] When a public housing project was planned for Negro occupancy in Chicago on a site already predominantly occupied by Negroes, a storm of protest arose. It was led by real estate interests and other champions of race protective covenants. The area was adjacent to a "restricted" district, near the lake, and generally desirably located. Thus it was opposed as an area for future Negro occupancy.

[23] Alonzo G. Moron, "Where Shall They Live?" *The American City,* April, 1942, p. 69.

of the property he occupies. The income from property in the Negro ghetto fluctuates widely and conspicuously. This occurs because the area is so concentrated and the incomes of its occupants are so unstable that the area reacts more or less as a unit. In periods of depression, there is a great decline in the earnings of the masses of Negroes, and property incomes in the area fall appreciably. When it is remembered that areas are opened to Negroes during periods of intense industrial activity, it is clear that the subsequent decline in property incomes and values is due to the fact that the majority of the occupants are insecure marginal workers.

If there is a genuine desire to protect property values in high-rent areas contiguous to the Black Belt, there is a more effective instrument than a restriction based on race, creed, or color. As we have noted above, racial covenants may delay Negro occupancy, but they are not an absolute bar; once they give way at any point—under the pressure of the swelling housing needs of Negroes—they no longer prevent the mass influx of Negroes. Nor do they offer protection against the invasion of white tenants of low income—tenants who will also, because of economic necessity, resort to over-crowding and the acceptance of roomers. Most important for property values, however, is the fact that under the current system of racial covenants and its mental framework, once there are a few Negroes in an area, the whites move out *en masse*. It is this movement of the whites out—rather than the movement of a few Negroes in—that leads to a drastic fall in property values.[24] For once there are vacancies, Negroes, without regard to income, standards of living or community attitudes, rush in. They are looking for some place to live. Many are not concerned primarily with neighborhoods or housing standards.

If, instead of restrictions on account of race, creed, and color, there were agreements binding property owners not to sell or lease except to single families, barring excessive roomers, and otherwise dealing with the *type* of occupancy, properties would be better protected during both white and Negro occupancy. This would afford an opportunity for the Negro who has the means and the urge to live in a desirable neighborhood and it would protect the "integrity of the neighborhood."[25] It would also prevent, or at least lessen, the exodus of all whites upon the entrance of a few Negroes. But it would do more; it would become an important factor in removing racial covenants in other improved and vacant areas. Such action would permit areas open to Negro occupancy to expand more normally. It would provide more space and housing units for colored people. This, in turn, would lessen the pressure upon other, ill-adapted (from the economic point of view) neighborhoods, permit selective in-migration of Negroes into such areas, and reinforce the type of protection mentioned above.

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[24] There is a suburban area in Washington, D. C., called Brookland, where the reverse of the usual process has occurred. For over 50 years a small number of Negroes with stable incomes have lived in the area. During the past two decades a large number of colored families have moved in. Just prior to the war scores of colored people built new homes on vacant lots. Most of these homes cost from $7,500 to $15,000. They are better designed and constructed than are the existing dwellings. Their occupants were of a higher educational and cultural level than the majority of their white neighbors. Property values in Brookland have increased and the white owner who is contiguous to Negro-owned property can now sell at a higher price than ever before. Many elect to stay in the area although there is a ready buyer for all available property.

In middle-class Westchester, N. Y., there is a similar, though smaller, bi-racial community of home owners. See Lenore Mummy and Dorothy Phillips, "A Dream Come True," *Negro Digest*, May, 1944, pp. 53-56 (condensed from *Common Sense*, April, 1944).

[25] I am indebted to Mr. James C. Downs, Jr., of Chicago for the expressive and significant term "integrity of the neighborhood."

The only permanent protection to values in the better class neighborhoods contiguous to present Negro occupancy is to secure adequate space and housing for the colored population elsewhere.[26] If, as has been said before, this housing is well located and well designed, it will be more desirable to low-income, Negro families than are the existing structures in the high-rent neighborhoods. Were such facilities available, the demand of Negroes for high-rent houses in neighborhoods near to the Black Belt would be small. Those who sought such houses would, as in the case of earlier in-migrant groups, be largely persons of comparable or higher cultural and economic status than the present inhabitants. The infiltration of such people, if properly timed and understood, would not lead to mass exodus of present white occupants. It would not occasion physical decay; it would not lead to a decline in property values.[27]

From this analysis it follows that race restrictive covenants are, in the end, the death knell to white occupancy and desirable occupancy standards in the high-rent areas contiguous to the Black Belt. This follows because the existence of similar racial covenants elsewhere in the city diverts a low-income group from its normal avenues of expansion. Because it cannot go elsewhere, it follows a geographic path of slow but steady and inevitable expansion. When higher income whites "protect" their property against Negroes (what they should be concerned about is not racial occupancy, but occupancy standards and neighborhood integrity), other whites "protect" their property against Negroes too. It is this latter fact which constitutes the greatest threat to the high-rent areas.

IV. What Can Be Done

Negroes move into northern cities principally in response to economic demands.[28] Thus the two great waves of Negro migration into industrial centers have been incident to the labor demands of two World Wars. In the first, the migration of Negroes was initiated early because there was an immediate and pressing demand for their labor in war plants. In World War II, Negroes did not begin to move into industrial centers until the fall of 1942, long after there had been heavy in-migration of white workers.[29] During both wars the restrictions on areas into which colored workers could live created serious economic, social, and racial problems. At the end of World War I, housing figured largely as the principal cause for the race riots which spread throughout the country.

Some cities view the in-migration of large numbers of Negroes with alarm and hesitate to improve their housing lest it encourage the arrival of more colored people or discourage the out-migration of those who have moved in recently. Such an attitude is unrealistic. As has been pointed out above, the mass movement of Negroes (as of all the elements in the population) is motivated primarily by the prospect of job opportunities. If there continue to be expanding needs for workers, Negroes will con-

[26] It is this type of development among non-colored groups which has offered them a natural expansion. Hoyt, *op. cit.*, p. 112. It is the limitations on this normal movement of the Negro population which makes it a threat to property values in the better areas contiguous to the Black Belt. Yet, the very actions and attitudes of the present occupants of the better-class neighborhoods become the chief barrier to a normal expansion of Negro occupancy in other areas.

[27] For an actual illustration, see the case of Brookland, D. C. cited in footnote 24.

[28] See the present writer's "Economic Factors in Negro Migration—Past and Future," *Social Forces* (October, 1939), pp. 90-101.

[29] It has been estimated that seventy-five per cent of the Negroes who migrated to urban centers between January, 1940 and June, 1943 moved after September, 1942. "Negro Internal Migration, 1940-1943: An Estimate," *A Monthly Summary of Events and Trends in Race Relations*, September, 1943, pp. 10-13.

tinue to move into industrial centers, regardless of the availability of adequate shelter. On the other hand, when there are less economic opportunities the rate of in-migration will diminish. The stability and growth of Negro population in urban centers during the past three decades is amply attested by censual data. Past population trends indicate that the great bulk of colored in-migrants are in our cities to stay. It is doubtful if the availability of housing will influence this movement very much. The problem which our cities face, therefore, is to provide adequate, decent housing for their increasing Negro populations.

The analysis which has been presented above indicates that: Negroes need more housing; this housing should be designed to meet the rent-paying ability and family composition of its occupants; more land area must be opened to the use of colored people; and racial occupancy restrictions prevent a rational approach to this problem. The pressure of numbers and the changes in property use which will come once construction is revived will inevitably lead to extensions in the areas and facilities occupied by Negroes. This can be achieved in an unplanned manner or it may be planned. If the former occurs, racial tensions and possible conflict are inevitable; if the latter is engineered, these tensions can be minimized and conflict may be avoided.

A community wishing to meet this problem in a constructive manner should take the following action:

First: Plan now to make new housing available to Negroes. Municipal authorities should prepare for well-conceived public housing projects, and private enterprise should be encouraged to develop planned communities. These actions should be followed by large-scale slum clearance and reclamation projects. Every effort should be made to prevent building up new ghettos. The extent to which privately financed developments can meet the needs of Negroes depends upon the wages and degree of steady employment Negroes receive in the postwar period.

Second: Be sure that this new housing is located and designed to meet the requirements of the market. It should be available at rents or at selling prices within the reach of its occupants so that they will not have to resort to doubling-up and over-crowding. Group developments will be required, and there should be enforceable occupancy standards.

Third: Take steps now to open new, non-segregated areas to Negro occupancy. It is important to keep these new areas open to all racial groups in the population so that any of these groups can expand in the future without encountering the opposition of other groups which have vested interests in certain neighborhoods.

Fourth: Become informed about the limitations and ultimate social costs of race restrictive covenants. They do not protect property values; they prevent a rational approach to the housing of minorities; they establish ghettos; and they create economic and social problems which lead to racial tensions. As long as they are widespread, each increase in Negro population will occasion the same problems which we now face.

Land Tenure in Brazil

By T. LYNN SMITH*

ONE who reads the very considerable Brazilian literature dealing with the nation's social and economic problems is sure to be impressed by the slight consideration that has been given to the subject of land tenure. This is not because Brazilian scholars have been callous regarding the social problems of agriculture. Agricultural credit and cooperatives received specific mention in the Constitution; a great deal of attention has been devoted to the problems of illiteracy and the rural schools, latifundia and the unfavorable situation of the working masses, poor health, malnutrition and diet; and there have been extensive discussions of rural poverty, isolation, droughts, migration, and the other phases of the rural problem as we know it in the United States. But questions relative to land tenure rarely receive recognition. Even the books on rural sociology and agricultural economics omit land tenure from the outlines of materials presented.[1] Such lack of attention indicates that this phase of the land problem has not been acute in the past. As it is now becoming so, especially in Sao Paulo, a much greater interest in the subject of land tenure may be predicted for the near future.

Nature of Brazilian Property Rights in the Land

Brazilian lands are held under a system of ownership in fee simple very similar to our own except that mineral rights belong to the federal government. The right of eminent domain may be exercised by the state or nation in cases of public necessity or public utility. On the first score, lands may be taken if needed for national defense, public security, public succor or relief, or for public health. Disappropriation of lands on the score of public utility is justified if they are needed to provide locations for centers of population or institutions to engage in public assistance, education, or public instruction; the opening or prolongation of streets, parks, canals, railways and other public thoroughfares; the construction of works or establishments designed to promote the general welfare; and for the opening and working of mines.[2]

Evolution of Property Rights in Brazil

As in North America the founding nation, by right of discovery and conquest, assumed the rights to the land in the newly discovered territories. Gradually, throughout the colonial period, property rights in land were transferred from public to private hands and passed from one person to another. Very early the lands were all divided among twelve noblemen as *capitanias* or immense baronies. Each of these barons had the right to give grants of land, or *sesmarias*, to settlers in his capitania, but was prohibited from making grants to his own close kinfolk, or from themselves securing land, even indirectly, until it had been used at least eight years by those to whom the *sesmarias* were granted.[3] It was soon discovered that this was

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[1] See, for example, the best Brazilian work on rural sociology, A. Carneiro Leão, *Sociedade Rural* (Rio de Janeiro: Editora S. A. A. Noite, 1939); and Fabio Luiz Filho, *Aspectos Agro-Economicos do Rio Grande do Sul* (Sao Paulo: Livraria Academica, 1937). See also the list of rural problems given by M. A. Texeira de Freitas in his article "Eduãcao Rural," *Revista Nacional de Educacao*, March and April, 1934, pp. 54-79.

[2] Cf., *Codigo Civil Brasileiro*, Articles 527 and 590.

[3] Cf., Ruy Cirea Lima, *Terras Devolutas* (Porto Alegre: Livraria do Globo, 1935), pp. 31-35.

not successful in promoting settlement, so these grants were revoked and authority again assembled and placed in the hands of the king's viceroy. Under the viceroys the only manner of distributing the land was by grants of large tracts as *sesmarias*. Everyone applying for a *sesmaria* sought to convince the crown's representative that he was of "good" family, of noble lineage, and possessed of the slaves and capital necessary for the establishment of an *engenho*, i. e., sugar plantation and mill. These *sesmarias* measured at least two leagues (about 7.5 miles) on a side, and some of them were of almost boundless extent.

It is important to note that, in the alienation of lands, the transferral of rights was almost complete. The vestiges of feudalism that remained were due for the most part to the manner in which the large estates were operated and not because of the crown's failure to give free and unhampered rights to the land. The obligation to pay one-tenth of the produce as tithing, first to the church and later to the state, was imposed.[4] The king also reserved the right to establish towns or villages where they were judged necessary and to use the hardwoods growing on the land for the construction of vessels. From time to time other restrictions were added, such as a quit rent in 1685.[5] A provision was made, February 23, 1711, that the lands should never by any title pass into "the dominions of the Religions," and "where these Orders already possessed estates, they were to pay tenths, like the estates of the laity; and if any lands or houses were bequeathed to them, the bequest was not to take effect without the King's permission."[6]

The granting of *sesmarias* was discontinued in 1822 when Brazil declared her independence from Portugal. There followed three decades of great confusion in land policies and procedures during which there was a great development of unauthorized occupation through squatting on vacant lands. On September 18, 1850, Law 601, designed to systematize the land law of the empire, was approved. Its provisions included those for legitimizing the possessions of bona fide settlers who had occupied and improved land. It established that in the future legal title to public land could be had only by purchase. But no fundamental changes in property rights were introduced.

In 1889 Brazil overthrew the empire and established the republic. This marked the initiation of a very significant change in land policy. Prior to that time the public domain had belonged to the empire, the provinces being without lands of their own except for those occasionally granted to them for specific purposes as, for example, the areas six leagues square given to each province in 1848 and to be used for colonization projects.[7] But with the adoption of the republican constitution the public lands became the property of the states. Naturally this made subsequent history very complex, but the major features of property rights had already been determined. The states busied themselves mainly with determining the acreages

[4] Henry Koster explains that in the early phases of the colonization of Brazil the clergy had a difficult time maintaining themselves and the religious institutions with the proceeds from the tithe. Accordingly, they petitioned to be paid fixed stipends and for the state to take the tithes. He also states that in the early nineteenth century the clergy were complaining because of the bargain their predecessors had made. *Travels in Brazil* (London: Longman, Hurst, Rees, Orme and Brown, 1816), pp. 31-32.

[5] J. C. Lima Pereira, *Da Propriedade no Brasil* (São Paulo: Casa Duprat, 1932), p. 7.

[6] Robert Southey, *History of Brazil*, Vol. III (London: Longman, Hurst, Reese, Orme & Brown, 1819), p. 146.

[7] João de Menezes e Souza, *These Sobre Colonizacao do Brazil* (Rio de Janeiro: Typographia Nacional, 1875), p. 274.

and location of lands belonging to the public domain, developing policies for its survey and sale, establishing procedures for validating claims, and settling conflicts between claimants. There seem to have been few innovations with respect to additional rights granted or restrictions imposed.

Land Tenure in 1920

The latest available data on land tenure in Brazil are those secured in the 1920 census, although the results of the 1940 census are now being tabulated. In 1920 only one-fifth of the land in Brazil was classified as "land in rural establishments." Of this area, about 433,500,000 acres, more than one-fourth, was still covered by forests.

Tenure categories utilized in the tabulations are three: proprietors, administrators and renters. This primary classification is then subdivided according to the nativity of the operators so that it is possible to determine for each tenure class the number of farms, the acreage of land, and the value of farm properties of the native-born and foreign-born owners. Special tabulations are necessary in order to determine the proportion of owners, renters, and administrators who are foreign born.

According to the results of the 1920 census there were in all Brazil 648,153 rural establishments or farms. Of these only 23,371, or 3.6 per cent, were operated by renters. Certainly those who rely on simple percentage-of-tenancy figures could find in these data little basis for sounding an alarm. Tenant-operated farms were slightly larger than the average, including 4.9 per cent of all land in farms, but they accounted for only 4.3 per cent of farm values. Administrators were in charge of farm operations on 47,572, or 7.3 per cent of all farms. But these estates accounted for 22.7 per cent of the land and 22.1 per cent of land values in Brazil. This leaves owner-operatorship as the dominant type of tenure in Brazil. In all, 577,210 Brazilian farms—89.1 per cent—were classified as being operated by their owners. However, their farms were smaller than the average, including only 72.4 per cent of the land and 73.6 per cent of the value of the nation's farms. Tables I, II, and III indicate how the tenure categories and the size and value of farms operated by operators of each class vary throughout Brazil.

TABLE I. TENURE OF BRAZILIAN FARM OPERATORS, BY STATES, 1920*

STATE	Number of Farms	Percentage of Farms Operated by:		
		Owners	Administrators	Renters
Brazil	648,153	89.1	7.3	3.6
Alagôas	8,840	88.9	8.5	2.6
Amazonas	4,946	82.5	12.5	5.0
Baía	65,181	87.2	10.2	2.6
Ceará	16,223	84.4	12.8	2.8
Distrito Federal	2,088	64.6	2.6	32.8
Espírito Santo	20,941	93.6	4.8	1.6
Goiaz	16,634	86.0	12.7	1.3
Maranhão	6,674	77.2	20.2	2.6
Mato Grosso	3,484	81.9	12.2	5.9
Minas Gerais	115,655	92.6	5.6	1.8
Pará	26,907	87.9	7.6	4.5
Paraíba	18,378	88.8	7.5	3.7
Paraná	30,951	93.9	2.8	3.3
Pernambuco	23,336	88.0	6.7	5.3
Piauí	9,511	78.3	19.8	1.9
Rio de Janeiro	23,699	83.2	9.8	7.0
Rio Grande do Norte	5,678	85.1	11.1	3.8
Rio Grande do Sul	124,990	88.0	6.1	5.9
Santa Catarina	33,744	95.1	2.3	2.6
São Paulo	80,921	89.4	7.7	2.9
Sergipe	8,202	92.2	6.7	1.1
Acre	1,170	73.9	10.3	15.8

* *Source:* "Recenseamento do Brazil, 1920," *Agricultura*, III, Part 1, 9 (Rio de Janeiro: 1923).

Data in these tables indicate that the leasing of lands for use in agricultural operations is most prevalent in the more thinly populated portions of Brazil, the Amazon Valley and Mato Grosso, and in Rio de Janeiro, Rio Grande do Sul, and Pernambuco. The renting of lands was least prevalent in Sergipe, Goiaz, Espírito Santo, Minas Gerais, and Piaui.

TABLE II. RELATIONSHIP OF OPERATION BY ADMINISTRATORS TO SIZE OF FARM AND VALUE OF FARM LAND IN BRAZIL, BY STATES, 1920*

STATE	Percentage Administrator-Operated:		
	Of Farms	Of Total Acreage	Of Total Land Value
Brazil	7.3	22.7	22.1
Alagôas	8.5	14.4	14.1
Amazonas	12.5	20.1	24.9
Baía	10.2	19.6	20.5
Ceará	12.8	19.4	15.5
Distrito Federal	2.6	44.5	19.6
Espírito Santo	4.8	9.4	8.0
Goiaz	12.7	21.7	16.1
Maranhão	20.2	30.2	27.4
Mato Grosso	12.2	37.3	34.6
Minas Gerais	5.6	14.2	11.3
Pará	7.6	29.1	24.4
Paraíba	7.5	15.9	12.4
Paraná	2.8	23.1	13.9
Pernambuco	6.7	11.8	13.4
Piauí	19.8	31.5	30.1
Rio de Janeiro	9.8	23.0	24.1
Rio Grande do Norte	11.1	18.2	16.5
Rio Grande do Sul	6.1	18.8	17.8
Santa Catarina	2.3	15.0	7.8
São Paulo	7.7	29.7	36.9
Sergipe	6.7	21.6	14.5
Acre	10.3	28.2	31.3

* *Source:* "Recenseamento do Brazil, 1920," *Agricultura*, III, Part 1, 9 (Rio de Janeiro: 1923).

That particular variety of absenteeism which leaves an administrator in charge of an estate was most prevalent in the north where the proportion of farms operated by administrators amounted to one-fifth in Maranhão and Piauí, one-eighth in Ceara, Goiaz, Amazonas, Mato Grosso, and Rio Grande do Norte. On the other hand, this type of operation was almost unused in the small farming states of Santa Catarina and Parana, and relatively infrequent in Minas Gerais and Rio Grande do Sul. Owner-operatorship was the most distinctive feature of the family-farm states of Santa Catarina, Paraná, and Expirito Santo. It also prevailed to a significant extent in Minas Gerais and Sergipe. In all of these, owners were operating 90 per cent or more of the farms; in Santa Catarina

TABLE III. RELATIONSHIP OF TENANCY TO SIZE OF FARM AND VALUE OF FARM LAND IN BRAZIL, BY STATES, 1920*

STATE	Percentage Tenant-Operated:		
	Of Farms	Of Total Acreage	Of Total Land Value
Brazil	3.6	4.9	4.3
Alagôas	2.6	2.8	2.6
Amazonas	5.0	21.1	10.4
Baía	2.6	.8	1.6
Ceará	2.8	1.9	3.3
Distrito Federal	32.8	11.1	22.1
Espírito Santo	1.6	1.2	1.4
Goiaz	1.3	.8	.6
Maranhão	2.6	1.1	.9
Mato Grosso	5.9	2.7	2.7
Minas Gerais	1.8	1.2	1.7
Pará	4.5	7.7	4.5
Paraíba	3.7	2.7	3.8
Paraná	3.3	3.9	2.7
Pernambuco	5.3	6.3	13.7
Piauí	1.9	.9	1.4
Rio de Janeiro	7.0	5.0	4.7
Rio Grande do Norte	3.8	2.8	3.9
Rio Grande do Sul	5.9	9.5	10.1
Santa Catarina	2.6	3.0	2.2
São Paulo	2.9	2.6	1.8
Sergipe	1.1	.8	1.9
Acre	15.8	42.3	17.9

* *Source:* "Recenseamento do Brazil, 1920," *Agricultura*, III, Part 1, 9 (Rio de Janeiro: 1923).

the proportion was 95.1 per cent. On the other hand, the owners had turned their lands over to others, either by renting them out or hiring an administrator to take charge, most frequently in Acre, Maranhão, and Piauí.

Other Tenure Categories

Although the data presented above are for 1920, the distribution as between the tenure classes of farm operators probably has not changed markedly in most of Brazil since that time. The considerable development of tenancy in the state of São Paulo will be treated later. In the meantime it is important to consider briefly the tenure situation of the rural masses who are not farm owners, administrators or renters. Many and varied are the categories into which these might be grouped. But the mere classification, unaccompanied by descriptions of the tenure relationships that prevail, would be of little moment. Most important of all is the necessity of keeping in mind that the great bulk of Brazil's population is to be classed either in the category of agricultural laborers, or in a kind of twilight zone that lies between an unrestrained nomadic existence in which a meager livelihood is gained by collecting, fishing, or a little haphazard agriculture and a more settled existence as a regular worker on an estate. On the social scale the *colono* on the São Paulo coffee *fazenda* or the sugar *usina* would probably rank at the top. Farther down the scale are millions of his countrymen who live on the cattle, sugar, cocoa and other types of large properties throughout the country, even though technically some of them might be considered to be tenants, or even "farm operators," in the sense that they are responsible only to themselves as to where they squat or "intrude" and make a small *roça*.

From Squatter to Agregado

Throughout a very large part of Brazil, land is of little value and is held in extremely large tracts by proprietors whose primary interest is to keep enough people about so that they can obtain essential help. Always there is the *falta de bracos* (lack of hands) in Brazil. It is not easy to retain a labor force in Brazil because the interior is sparsely populated, but it is easy to secure the means for satisfying basic creature wants and the lower classes are habituated to a nomadic type of existence. Under these circumstances tenure relationships tend to be very informal indeed. Through long practice the *caboclos*, *matutos*, and *sertanejos* feel free to squat or "intrude" where they please. They establish temporary quarters, help themselves to the *carnauba*, *babassu*, fish, and other things to be had for the taking, and also cut and burn a piece of the forest in which to make their annual *roça* of beans, mandioca, corn, etc. Since labor is always the limiting factor in Brazilian production, the land owner may find it to his advantage to permit these rural folk to live on his land. Foreign concerns soon find it impossible to fence them out. Moreover, the wise *fazendeiro* will supply them a new axe, offer a little ammunition now and then, provide essential medicines, furnish a few of the essentials for improving the hut, assist them in getting fishing equipment, allow the use of a pack animal from time to time, etc. In return he may ask them to bring him a pig, a few chickens, a part of their corn crop, some of the mandioca they have produced, a few fish, and finally to work a day now and then. In short, he will seek to take over the role once played by the selected leaders sent by provincial governors to colonize in certain valleys and to bring under their in-

fluence the people who had wandered away and established settlements in this valley or along that stream.[8] By degrees some of these people come to be part of the *fazendas*, the owner's *agregados*, and the others move on. The nature of their tenure is not very clear or, better, it does not fall in the categories familiar to students of the subject in the United States.

The relationship between the proprietor and the *agregado*, an adjustment between master and man that is so widespread throughout Brazil, is well described in the words of Djacir Menezes who says of it: "There is an exchange of services, for compensation, in relations which are reminiscent of feudalism: a tribute for activity on the land of the proprietor, as was the case before the consolidation of the capitalistic regime."[9] Oliveira Vianna described the status of the *agregados*, even before the abolition of slavery, as follows:

"They are a kind of free *colonos*. They differ, however, from the *colonos* proper. The German *colono* of Santa Catarina is a small proprietor. The Italian *colono* of the Paulista *fazenda* is a salaried worker or a share tenant (*pardeiro*). The Vicentista *agregados* are neither one nor the other of these. They live outside the slave quarters in rude huts on small dispersed plots that are scattered about the great house on the hill to which they are oriented and which dominates them. From the fertile land they extract, almost without work, sufficient game, fruits and cereals to live a frugal and indolent life. They represent a type of small self-sufficing producer vegetating at the side of the large *fazendeiro* producer."[10]

And the very significant official report on colonization in Brazil attributed to the high degree of concentration in land ownership:

". . . the constitution, almost feudal, of the proprietorship of the soil and this band of *agregados*, that on our rural establishments live in dependency upon and at the mercy and expense of the *fazendeiros*, at whose nod they are subservient and bowed, in order not to be ejected from their miserable *ranchos* [thatched huts] where they live and from the *roça* [burned over clearing] or *engenho* [plantation] where they work to gain their daily bread."[11]

Of other descriptions, that by Sir Harry H. Johnson, despite its somewhat strained emphasis of the racial aspects, is one of the best. Says this noted British writer:

"The conditions regarding the acquisition of land (more especially Government land in new districts) requires the possession of more or less ready money. The white man, therefore, acquires the land and surveys it at his own expense. Before he casts his eye over this likely estate it may already have been squatted upon by negroes, negroids, or 'Indians', (these squatters are called 'Moradores' in Brazil), or after the estate has been acquired and surveyed, the Moradores drift thither and settle on it with or without permission. But before long they are obliged to come to terms with the real owner of the estate. . . . So, far from the owner desiring to evict the squatter, he is anxious to come to terms with him, because if he is harsh, the squatter with his invaluable labor will move off to an unclaimed piece of land or to a more considerate employer. The unwritten law which all parties believe in and observe is that the Morador shall pay for his rent and other benefits in labour, and this he is quite ready to do, provided the demands on his time are not unreasonable. But the estate owner generally keeps a store, and is in a small way a banker. The result is that the Moradores—Negro or Indian—are generally more or less in debt to the proprietor they serve; and the latter, if need be, has recourse to the law to compel the payment of debt by a reasonable amount of labour. Usually quite patriarchial conditions arise between the white Padrao and the colored 'Camarada."[12]

[8] Cf., F. J. Oliveira Vianna, *Populacoes Meridionaes do Brasil* 4th Ed. (São Paulo: Companhia Editora Nacional, 1938), pp. 98-123.

[9] *O Outro Nordeste* (Rio de Janeiro: Livraria Jose Olympio, 1937), p. 66.

[10] *Op. cit.*, p. 83. Cf., Jose Francisco de Rocha Pomba *Historia do Brazil*, Vol. V (Rio de Janeiro: Benjamin de Aguila; undated) p. 515, who says: "The *aggregado* remained in a condition that is not known to differ from the one of the true slaves. He was the serf of the Middle Ages and perhaps less."

[11] João Cardoso de Menezes e Souza, *Theses Sobre Colonizacao do Brasil* (Rio de Janeiro: Typographia Nacional, 1875), p. 309.

[12] *The Negro in the New World* (London: Methuen & Co., 1910), p. 100.

Such arrangements as those described above prevail today over a very large portion of Brazil, and particularly in Mato Grosso, Goiaz, northern Minas Gerais and all the states to the north of them. The landlord continues to be "satisfied to have somebody on his land, on whom he may call for help against the payment of a daily wage."[13] Over much of Brazil, tenure questions resolve themselves almost entirely into consideration of ownership and the rights, duties, privileges, and obligations of the *agregado*.

Share Cropping in Brazil

Although the *agregado* or the *camarada* could be considered neither as a share hand or a share cropper, frequently there is an element of share wages in the terms on which they are permitted to live on a *fazenda* and make use of the land. If the owner is an absentee, if the proprietor is lax in his supervision, or if what was once a well-managed plantation becomes decadent, a share system is likely to develop. In some cases the former *agregado* may become so independent that he may deserve classification as a share renter who merely pays rent for the land he operates. In any case in several parts of Brazil a system of *parceira* or sharing is becoming well developed. This is particularly true in the cotton-producing sections of Sao Paulo, in the northeastern cotton districts, and in the cane-producing sections of Pernambuco and the neighboring states. The following description of the system of share cropping in vogue in Sao Paulo might well be that of tenure arrangements on a plantation in the southern part of the United States:

> "On the estate are 60 families, each of which has three hectares; they work on the share system, keeping the proceeds of two-thirds for themselves and one-third goes to the company. The tenant is debited with two-thirds of the cost of manure; money is advanced for implements, manure, etc. The tenants must conform to the instructions of the manager as regards the cultivation of the plot. The manager has further call on the tenant when he requires labourers for the land of the company, where he raises special cottons; for this work they get a daily wage."[14]

At present the following system of *parceira* or share cropping is prevalent in São Paulo. The owner prepares the ground for the seed and in that condition it is turned over to the *parceiro*. The latter is responsible for the planting, the cultivating, and the harvesting processes. The product is divided in the field, each party to the contract being responsible for the transportation of his share. If insecticides are required, the proprietor furnishes the materials and the worker applies them. If fertilizers are used, the cost is shared equally. Generally the product also is divided on a fifty-fifty basis.[15]

Tenure of the Vaqueiros of the Sertões

At best the *agregado*, the *camarada* and the São Paulo *colono* are laborers. The parceiro hardly ever could logically be classed as a farm operator. But there is a type of non-owner among Brazil's rural masses who is entitled to be classified with those who operate farms. This is the *vaqueiro* whose job it is to care for a herd of cattle in the *sertão*. Euclydes da Cunha in his classic *Os Sertões* has given an excellent description of the tenure arrangements under which this class of sertanejos carry on their stock raising enterprises in the great interior of Brazil's Northeastern region. The following details are taken from this excellent book:

[13] Arno S. Pearse, *Brazilian Cotton*, Second Ed. (Manchester: International Federation of Master Cotton Spinners' & Manufacturers' Associations, 1923), p. 111.

[14] *Ibid.*, p. 81.

[15] See Carlos B. Schmidt, "Systems of Land Tenure in São Paulo," *Rural Sociology*, September, 1943, pp. 242-247.

"The owner of the land lives on the coast, and oftentimes has never even seen his vast domains in the interior. The *vaqueiros* [cowboys] carry on generation after generation by means of an unwritten share contract. All have the same contract, which is scrupulously observed, namely that in return for caring for the cattle they are to have one-fourth of the increase. At the end of the season the settling of accounts is made, in most cases without the presence of the most interested party. At that time the *vaqueiro* separates the patron's calves, three-fourths of all, and brands them with the mark of the owner; on the remainder he places his own brand. Then he writes to the patron, giving him a minute account of the affairs of the *sitio*, going at length into the slightest details; and he continues uninterruptedly with the work."[16]

Growth of Farm Tenancy in São Paulo

In recent years, with the introduction of Japanese immigrants and the expansion of cotton production, there has been a considerable development of farm tenancy in São Paulo. Some data secured from the register of rural properties that is maintained by the Departamento Estadual da Estatistica help to bring out the importance of this development. Of the 170,462 farms included in the register, compared with the 274,740 agricultural properties enumerated in the state census of 1934 and 246,862 in the latest national census of 1940, a total of 33, 628 were operated by renters. In some of the *municípios*, where most of the land has been rented to Japanese for cotton production, the proportions of tenancy exceed 75 per cent. However, there are many tenants of other nationalities and in general farm tenancy in São Paulo is to be regarded as a step up the agricultural ladder. The class of tenants is not composed of dispossessed farmers as is our own midwest. On the whole the development of tenancy in Sao Paulo is to be regarded as a step in the direction of combining the functions of owner, manager and laborer in the same person —an end greatly to be desired in Brazil. The most negative aspect of this increase in tenancy is probably the opportunity it has offered the Japanese to demonstrate their proficiency in soil mining practices. After a Japanese has rented the land for a few years Brazilian countrymen say it will never produce anything again, "not even grass."

[16] Euclydes da Cunha, *Os Sertoes* (15th ed., Rio de Janeiro: Livraria Francisco Alves, 1940), pp. 122-124; also cf., Henry Koster, *Travels in Brazil* (London: Longman, Hurst, Rees, Orme & Brown, 1816), pp. 148-149; and Robert Southey, *History of Brazil* (London: Longman, Hurst, Rees, Orme & Brown, 1819), p. 756.

The Political Economy of Forest Conservation in the United States

By A. D. FOLWEILER*

WHEN the white race began the conquest of the North American continent, the major environmental obstacle was in its forest. On the eastern shores of the continent, trees were a disutility. They occupied soil needed for the cultivation of agricultural crops and afforded the redskin a place where he was reasonably safe from attack. But soon after their first adverse contacts with the forest environment the colonists discovered that the trees had utility. From them came the abundant raw material for houses, fuel, ships, and barrels. As a consequence, North American civilization developed in an environment of abundant timber. Forests and forest products became a part of the American tradition.

As Webb[1] so aptly expressed it, civilization east of the Mississippi River was founded on a forest environment that stood on three legs, viz., land, water and timber. When the expanding, restless population surged over the Alleghanies and beyond, across the Mississippi River to the 98th meridian into a region where trees were very scarce, one of the three important legs of American civilization was removed altogether and another was shortened. Only land was available in abundance. It was the impact of a civilization reared in the land-water-timber environment that created the demand for the timber in the public domain of the Lake States. The abundance of fine stands of timber in the Lake States and their proximity to an area that required forest products, particularly lumber, set in motion the circumstances that finally culminated in a radical change in our national policy as it applied to public land.

Associated as it is with a natural resource of national importance and part of the American heritage, forest conservation was eventually embraced by a not-too-willing government. An aggressive minority had worked steadfastly for the conservation of the nation's forest resources. Intertwined as forests were with the economy of the nation, it was fitting for the government to recognize the importance of forest conservation. To implement it, laws were enacted at the several levels of government. This paper is concerned primarily, however, with a discussion of the influence of federal legislation on forest conservation.

Progress in forest conservation has been irregular. There has been no steady, unfaltering movement toward clearly defined objectives. What is important, however, is that progress has been made. In the half-century from 1891 to 1941, the federal government has not only practiced forest conservation on nationally-owned land but has also assisted private owners to do the same. Forest conservation has been institutionalized by the enactment of legislation and each legislative act has contributed toward the still not-too-clear ultimate objective.

Periods of Forest Conservation

The political economy of forest conservation in the United States can be

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[1] Walter Prescott Webb, *The Great Plains* (Boston: Houghton Mifflin, 1936).

divided into four periods, viz., (a) that era prior to 1891—characterized by a change in the nation's land policy; (b) 1891-1918, creation of forest reserves west of the Great Plains and nationalization of the forest land east of the Mississippi River (by congressional action in 1907 the name was changed to national forests); (c) 1919-1930, cooperation of public agencies for forest conservation on privately-owned forest land; (d) 1931-1943, resurgence of demands for public control of timber-cutting on private forest land.

Before 1891: Forest Conservation Bestirs Itself

At the half-century mark of the nineteenth century there occurred a subtle change in national policy toward public land, best illustrated by the creation of the Department of Interior in 1849. One of the functions of the new department was to bring some order to the manner in which the public lands were handled, particularly in the Lake States. Here timber on the public domain was cut and processed by private operators, but the government received no revenue from the timber-fellings. Lumbermen simply helped themselves from the public domain until the coming of the farmer and the speculator forced them into buying land in order to get the timber needed for the mills. However, lumbermen were obliged to use the same land acts as farmers, and the agricultural land acts were not adapted to the acquisition of the timber needed so badly by the expanding population of the Middle West. While settlement was confined to the humid areas, forest products existed in such abundance that they could hardly be called an economic good. However, the settlement on the treeless plains created an enormous demand for timber and within a decade timber became an economic good. This accelerated the desire of entrepreneurs to acquire timber land but no change was made in the public land acts. Partial relief came in the form of the Timber Cutting Act and the Timber and Stone Act, both enacted in 1878. The former was enacted primarily for settlers and miners, while the latter made possible the purchase of land valuable chiefly for timber and stone. Because neither of these acts fulfilled the need of the time, i.e., available public timber for commercial purposes, both were abused as a means of obtaining raw material for sawmills.

Meanwhile, efforts were made to administer the forest land in the public domain in order to minimize actual expropriation of the timber by private persons who had no legal right to do so. The conflict between public and private interests could hardly be avoided because the tradition of the frontier was that the settler took from the wilderness what he needed for existence. However, in 1873 Congress appropriated (in a sundry appropriations bill) $10,000 for the protection of public timber, presumably against thieving, and in 1877 Secretary of the Interior Carl Schurz vigorously prosecuted timber thefts in the Puget Sound area.

The action of the Department of Interior, in endeavoring to lessen timber exploitation on public domain, was amplified by the deliberations of the American Association for the Advancement of Science in its 1873 meeting. The President of the Association, Dr. Franklin P. Hough, made a strong plea for the adequate safeguarding of the stock of timber on the public domain.

In 1876 a commissionership of forestry was established in the Department of

Agriculture. Cameron[2] takes pains to point out that, though the original draft of the legislation creating the commissionership provided for its being placed in the Department of Interior, when the law was enacted it was placed in the Department of Agriculture. Administration of the timbered land of the public domain, however, remained in the Department of Interior.

In 1886 professional forestry received public recognition. In that year Dr. Bernhard E. Fernow, a man trained in forestry, was appointed head of the Division of Forestry in the Department of Agriculture. In its first decade of existence, the Division of Forestry's work was almost entirely along statistical lines. Dr. Franklin P. Hough, the first division chief, and his successor, Nathaniel Eggleston, had amassed considerable data pertinent to forestry which were published in four volumes entitled, *Reports Upon Forestry*. When Dr. Fernow became division chief he altered the division's policy. The drive to accumulate facts and data on forest conditions in the United States changed to one of disseminating to the users of forest products facts on the technical properties of timber. Technical investigations were also conducted in forest measurements and forest biology and a start was made toward organizing forest nomenclature.

In 1878 Senator Plumb of Kansas, probably at the behest of Secretary Carl Schurz, introduced a bill into Congress which provided for the withdrawal of all timbered lands from settlement, and further provided for their administration by foresters. The bill was not enacted into law but in 1888, ten years later, a similar bill was introduced by Senator Hale of Maine, again without Congressional approval. Authority was finally obtained through Section 24 of the Land Act of 1891. The result of the conflict between the administrators of the public domain and the desire of the lumber industry to utilize timber on the public domain stimulated the enactment of many of the recommendations of the Public Lands Commission appointed for revising the public land laws. The Act of 1891, designed primarily to improve existing legislation dealing with public lands, included the famous Section 24 which provided for the establishment of forest reservation through withdrawals from public entry of forest land from the public domain. Authority for creating forest reservations from the public domain was vested in the president.

The inclusion of Section 24 in the Public Lands Act of 1891 marked a turning point in national land policy. It was a right-about-face in basic policy that so far had applied to the disposal of the public domain. No longer would the entire public domain be open to public entry. The government recognized that timber was essential to the economy of the nation and, through Section 24, made it possible for future generations to enjoy a resource to which American civilization had grown accustomed. The federal government acted to safeguard one of the nation's natural resources.

1891-1918: Nationalization of Forest Land

In the interval between 1891 and 1897 a curious situation occurred. The forest reserves were administered by the Department of Interior but the department had no foresters; nor did it have authority to administer these lands for forestry purposes. In 1897 authority was granted for the administration of the lands but the department still lacked

[2] Jenks Cameron, *Development of Government Forest Control in the United States* (Baltimore: Johns Hopkins Press, 1928).

foresters. The Department of Agriculture, on the other hand, had foresters in its Division of Forestry but no forest land to administer.

In 1898 Fernow left the Department of Agriculture's Division of Forestry and Gifford Pinchot succeeded him as chief forester. Pinchot's policies upon taking charge of the division in 1898 were: (1) to introduce good methods of handling forest land to landowners including lumber manufacturers as well as owners of small tracts; (2) to assist the plainsmen in afforestation; (3) to reduce loss from forest fires; and (4) to inform forest enterprisers with regard to opportunities in Alaska, Cuba and Puerto Rico.[3] Although considerable work was done with private landowners in an effort to have them adopt forestry practices, in very few instances did these efforts materialize into tangible forest management.

As a consequence of the revised land laws contained in the Land Act of 1891, the Secretary of the Interior attempted to administer the forest lands on the public domain. The administration was handicapped, however, because it lacked foresters but this deficiency was overcome in part in 1901 by the creation of a Forestry Division in the Department of the Interior. A graduate forester, Filbert Roth, was placed in charge. Other Interior branches were at first cooperative, but their attitude gradually changed so that by 1903 Roth and his subordinates resigned rather than attempt to overcome the obstacles created by other divisions of the department.

In January 1905 the American Forest Congress, its presiding officer being the then Secretary of Agriculture, made several recommendations pertinent to forest conservation. These were (a) repeal of the Timber and Stone Act, (b) amendment of the Forest Lieu Act, (c) creation of forest reserves on headwaters of the eastern watersheds, and (d) a unification of all federal forestry work in the Bureau of Forestry of the Department of Agriculture. With regard to the last-mentioned recommendation, Congress acted promptly. It transferred administration of the forest reserves from the Department of Interior to the Department of Agriculture in 1905, where it has remained ever since. At the time of transfer, the area in reserves amounted to approximately 85 million acres. In the decade that followed, the area was doubled, largely because of the influence of President Theodore Roosevelt and his Chief Forester, Gifford Pinchot. By 1912, the year Taft succeeded Roosevelt as president, there had been dedicated to timber production 165,027,163 acres of forest land, formerly part of the public domain.[4]

The tide of public opinion that made it possible not only to stop depredation of timber on public land, but also to have some of it withdrawn from private entry, was an easy step. It was not proposed that privately-owned land, never a part of the public domain, be purchased for forest reserves—a much more significant step. In 1899 a movement was started to preserve the forests of the Southern Appalachians. New England was not to be outdone, so its congressional members proposed in 1906 that there be national forests in the Appalachians *and* in the White Mountains. In 1909 Representative Weeks of Massachusetts introduced a bill making it possible to acquire private forest land for the protection of the watersheds of navigable streams. In 1911 the Weeks Law was enacted and contained the two elements of fundamental significance to forestry

[3] Jenks Cameron, *op. cit.*

[4] E. A. Sherman, "Twenty-Five Years of National Forest Growth," *Journal of Forestry*, 24:129-135, 1926.

in the United States. In the first place, it made possible the purchase of lands on the headwaters of navigable streams. In the second place, it established a cooperative technique whereby the federal government was enabled to assist the several states, and through them the individuals, in forestry activities. The important contribution made by the Clarke-McNary Law of 1924 was made possible largely because of the precedent that had been established for cooperative work in the Weeks Law of 1911.

Thus, in two decades the federal government had acquired 165 million acres of national forests, had transferred the administration from the Department of Interior to the Department of Agriculture where it was in foresters' hands, and had been granted the authority to nationalize, through purchase, privately-owned forest land.

1919-1930: Cooperation with Private Owners

For more than a decade, commencing in 1905, the Forest Service was absorbed in the task of organizing the management of the national forests. This activity included the acquisition of land under authority provided by the Weeks Law of 1911. In 1910 H. S. Graves succeeded Gifford Pinchot as chief of the Forest Service. The change in administrators occurred at a time when forest fires burned freely. The Great Idaho Fire of 1910 and others of that year impressed on foresters the fact that forest management was impossible without forest fire control. It was this experience that probably caused Chief Forester Graves to state: "The first measure necessary for the successful practice of forestry is protection from forest fires."[5] This statement contributed much toward the enactment of legislation that made it possible to extend public aid to private landowners for protecting their lands against fire. In 1924 the Clarke-McNary Law was passed. Although the law provided for funds for tree planting stock and advice in forest management to farmers and for studies in forest taxation, it was mainly concerned with public aid to private owners for protection from forest fires.

In the interval of 1916-1930 certain events occurred that are worth noting. Forest conservation had had its heyday, beginning with the Act of 1891 and terminating with the Weeks Law of 1911. Beginning with the Taft administration, there was less popular enthusiasm for forest conservation. This does not imply, however, that the forest conservation forces had retired. Although a vast timbered area was now in public ownership and made secure against depredations by enterprisers, there was a group in the Society of American Foresters that believed strongly that progress in forest conservation in the United States was inadequate. Acquisition of forest land in the east, authorized by the Weeks Law, had progressed slowly. Private landowners still owned most of the forest land and most of the stands of commercial timber. Very little attention was paid to land use practices directed toward continuous timber production on private land. In 1919 the Society's Committee for the Application of Forestry recommended that the only way to make satisfactory progress in forest conservation would be through public regulation of cuttings on privately-owned land.[6] These facts are mentioned to illustrate that Pinchot, chairman of the committee that prepared the report and a former chief forester who suc-

[5] H. S. Graves, *Protection of Forests from Fire*, U. S. Forest Service Bul. 82, Washington, 1910, p. 7.

[6] Report of the Committee for the Application of Forestry, "Forest Devastation: A National Danger and a Plan to Meet It," *Journal of Forestry*, 17:911-945, 1917.

ceeded Fernow and attempted to "sell" forestry to private industry, had grown impatient and wished to impose forest conservation on the nation's private forest landowners by the use of the police powers of government.

The outcome of the cross-currents of ideas on how to further implement progress in forest conservation was the enactment of the Clarke-McNary Law of 1924. Pinchot's successor as Chief Forester, H. S. Graves, did not subscribe to his predecessor's beliefs expressed in the Report to the Society of American Foresters. His philosophy was best illustrated by his statement referring to the obvious lack of forest management on privately-owned forest land:

"The problem presented is one that can be solved only by public action. The general practice of forestry on privately-owned lands in the United States will not take place through unstimulated private initiative . . . The function of the Federal Government, in addition to the handling of the national forests, would be to stimulate, guide, and coordinate state action and conduct necessary investigations regarding the best methods of forestry."[7]

In the same report there appears another very important statement which is generally overlooked:

"In the matter of private forestry, the government should work primarily through state agencies. To initiate the proposed policy, there should be a federal law authorizing the government to cooperate with the states in bringing about the *protection and right handling of forest lands* within their borders and providing means for such cooperation."[8] (Italics added.)

The Clarke-McNary Law made possible, through "providing means for such cooperation," the expenditure of federal funds on privately-owned land for forest protection. The law authorized the expenditure of not more than $2,500,000 annually for this purpose, but did not provide for the "right handling of forest lands" which was proposed by Chief Forester Graves. It may be that Congress assumed that if some degree of protection from fires were available, landowners would not hesitate to practice forestry. One can infer that Congress was of the opinion that "right handling" and "forest protection" were synonymous. Unfortunately, this is not the case. Protection from fire is merely a means to the end, viz., forest conservation or the continuous production of stands of timber and the associated utilities such as streamflow control, grazing, maintenance of wild-life habitat, and recreation.

When William B. Greeley succeeded H. S. Graves as chief forester in 1920, Forest Service policy still lay within the framework laid down by his predecessor. In addition to the passage of the Clarke-McNary Law, legislation known as the McSweeney-McNary Law was enacted during Greeley's administration in 1928 and provided for the establishment of regional forest experiment stations. A possible criticism of the law is that no provision was made for utilizing the state machinery already established for agricultural research in the several states. This omission may have been symptomatic of the trend in later federal forest policy, i.e., to concentrate authority in the federal government rather than to administer it through and by the states. The fact remains, however, that the McSweeney-McNary Law conformed to the policy expressed by Graves.[9]

The period 1916-1930 was distinctive in that a chief forester enunciated a clear policy for forest political economy. Furthermore, legislation was enacted that

[7] H. S. Graves, *A Policy of Forestry for the Nation*, U. S. Dept. of Agr. Circular 48, 1919, pp. 2, 3.

[8] Graves, *op. cit.*, pp. 2, 3.

[9] Graves, *op. cit.*

enabled most of the items of this policy to be put into action. It is unfortunate, however, that the stimulation for the "right handling" of private forests did not get the public support that "protection" got. Only one of the two necessary handles was placed on the public basket that was supposed to carry forest conservation to the private owner.

1931-1943: A National Plan and Conflicting Procedures

In 1933 there was published the most comprehensive public document on the subject of forest conservation released up to that time, known as the Copeland Report and entitled, "A National Plan for American Forestry."[10] The report presented data to demonstrate the superiority of public proprietorship of forest land. The recommended measures for achieving more forest conservation were; (a) more public ownership, (b) more public aid to private owners, (c) public regulation of private forest land, and (d) federal assumption of that part of the task, if and when other agencies could not or would not perform forest conservation. The report continued to emphasize the effects of forest depletion, the same theme out of which had developed Section 24 of the Law of 1891 and subsequent legislation.

In 1935 Congress passed the Fulmer Bill, under which the federal government can lend money to the several states for the purchase of forest land. The money advanced by the government is eventually to be returned by the states out of revenues from the acquired lands. However, no funds have been appropriated to implement this law and it is very doubtful whether the Fulmer Act will ever contribute much toward forest conservation. Fundamentally, it merely implemented a proposal of the Forest Service by making possible the greater public ownership of forest land, but the custody of these lands remains with state, not federal, administrative agencies.

In 1937 the Norris-Doxey or Cooperative Farm Forestry Bill was enacted, aimed particularly at initiating forestry practices on woodlands owned in connection with farms. Admittedly, the Clarke-McNary Act contained a section that provided for extending forestry leadership to farm woodland owners through the state agricultural extension services, but the funds made available under this section were woefully inadequate for the task. The Norris-Doxey Act contains a feature recommended by Graves in his report of 1919. Earlier congressional enactments had made possible the extension of the system of national forests, aid in forest fire protection of private lands and federal forest research, but in the Norris-Doxey Law a means was provided to carry forestry practices to the small landowner. The important place in forest conservation held by the non-industrial, small landowner was finally recognized. In most states the chief beneficiaries of the section of the Clarke-McNary Law which deals with fires are the large landowners, for the chief obstacle to the industrial landowner who wishes to practice forestry is fire. Owners of small tracts o forest land, however, are not aware of the economic advantages possible from the practice of forest conservation, and if they are aware of them they seldom know how to handle their forest lands. The large landowner usually has the resources to secure this information. Without the means and the incentive to purchase this information, forest conservation—as a land use practice—goes by default on small holdings. If the

[10] *A National Plan for American Forestry*, Document 12, 73rd Congress, 1st Session, Washington, 1933.

public wants these landowners to practice forestry, it is necessary to provide public leadership.

Several bills have been introduced into Congress on which no action has been taken. One was the Forest Restoration Bill of 1939, another the Forestry Omnibus Bill of 1941 and, recently, the Forest Conservation Bill of 1943. The elements of the Forest Restoration Bill consisted of a leasing arrangement under which small landowners would turn over to the federal government the management of their forest lands. Tied as it was to utilizing surplus labor and providing for federal control over numerous small tracts of forest land, the bill never received popular support. The Forestry Omnibus Bill of 1941 sought to correct deficiencies in earlier forestry legislation, particularly in the amount of funds available for cooperative forest fire control work, by proposing to increase the amount from $2,500,000 to $10,000,000 annually. This bill incorporated the work covered by the Norris-Doxey Act of 1937 in Section 4 of the Clarke-McNary Law, made annual contributions to local units of government that had been deprived of income because of national forest land acquisitions, and included several other items. Provision, too, was included for public regulation of privately-owned forest land. The Forest Conservation Bill of 1943 contained most of the essential features of the 1941 Forestry Omnibus Bill, but added items pertaining to forest insurance and funds for extension of the national forest lands. As stated above, none of these bills became laws.

Activity of States

For convenience, forest conservation by states can be placed in four major groups, viz., (a) protection from fire, (b) information on forest management, (c) management of state forest lands, and (d) taxation. All states with forest land provide some public assistance in protecting private land from forest fires. In a few states protection from fire is extended to all forest land; but in most states, particularly in the South, only specific areas are protected. The financial assistance provided by the federal government is extremely important in carrying on this work. In forest management, two states recently enacted legislation for the control of cutting on privately-owned forest land. In most states there is a small amount of assistance in forest management given in the form of advice and demonstrations to private landowners. A few states own and manage several million acres of forest land. And in other states county forests are of considerable significance. Several states have enacted legislation that defers, until the time of cutting, tax collections on privately-owned timber, viz., the so-called forest crop laws.

Protection of private forest land from fire is the outstanding contribution of the states to forest conservation. They have done very little toward educating private owners in the merits of forest management. They have relied all too much on federal leadership and programs, and their record to date, with a few exceptions, is unimpressive.

Achievements through the Political Economy of Forest Conservation

Substantial progress has been made in forest conservation largely through the leadership of the federal government, implemented by congressional legislative enactments. In 1942 the national forests contained 177,302,149 acres.[11] Of this area, only 20,741,193 acres were situated east of the Great Plains. This

[11] *Forestry in Wartime*, Statistical Supplement, Report of the Chief of the Forest Service, 1942.

means that only a little over 11 per cent of the national forest land has been acquired under the authority of the Weeks Law of 1911. This acquisition was at the rate of approximately 660,000 acres per year. But of the 177 million acres in national forests, more than half is considered to be "non-commercial," i. e., is too distant from market to warrant logging.

In addition to the national forest lands, other federal agencies administer 15,211,000 acres of commercial forest land. State, county, and municipal governments have title to 24,068,000 acres. Thus a total of 96,720,000 acres of commercial forest land has been "socialized."

The recent report of the chief forester[12] stated that 282,084,000 acres of privately-owned forest lands are receiving cooperative forest fire protection. It is presumed that this forest acreage is considered "commercial" in the sense that it could produce timber that could be marketed under present economic conditions. The total acreage of commercial forest land in private ownership is placed at 341,000,000 acres.[13] These data mean, therefore, that 82 per cent of the private forest land in the United States receives some form of forest fire protection.

Eight regional forest experiment stations have been established to conduct research in forest and range management. One of the most important accomplishments of the experiment stations has been the collection of data on forest resources through a nation-wide forest survey. This survey showed that in 1936 growth and drain on the commercial forest lands—expressed in cubic foot units—were slightly out of balance, with the drain in excess of growth by 20 per cent. If the relationship is expressed in terms of sawtimber, the rate of cut for sawlogs exceeds the sawtimber net growth by 50 per cent. These facts substantiated the timber depletion theme of the Forest Service. It is important to note, however, that the region with the largest forest area, viz., the South, had a balanced growth and drain. The Lake States were also in balance and the northeastern states almost balanced their drain with growth.

In spite of the fact that the public has offered very little inducement to private owners to practice forestry, there certainly is no "timber famine" apparent. It is desirable to have more forest land on which forest conservation is practiced, but no national catastrophe is impending because of a lack of it.

Recent Proposals

The National Program. The National Plan for American Forestry[14] stated that a forestry program was justified; (1) to produce raw material for forest products industries and for the associated economic and social advantages, (2) for streamflow control through reducing erosion and subsequent flooding and silting, and (3) for recreational purposes, including the provision of a habitat for game. These objectives are excellent so far as they go, but the question can be raised: Are they specific enough to justify the program for the regulation of *all* privately-owned forest land and for the socialization of half the nation's forest land as recommended by the Acting Chief Forester, Earl Clapp?

" . . . It would be good public policy to shift 140 million to 150 million acres from private to public ownership, that communities and states should go as far as they can, and that the federal government should acquire and manage the rest. It should be noted, however, that this shift would still leave more than one-half of all the

[12] *Forestry in Wartime, op. cit.*

[13] *Forestry on Private Timberland,* Misc. Publication 381, U. S. Dept. of Agriculture, 1940.

[14] *op. cit.*

commercially valuable land in private ownership."[15]

The need of a forestry program cannot be denied. The maintenance of vegetative cover, especially a forest cover, makes an important contribution to streamflow control through a reduction in the rate of erosion, alleviation of the effects of flashy runoff and curtailment of damage to land overflowed by floods. These benefits are practically always accompanied by lumber production. Although no one can seriously question the necessity of protection forests, nevertheless there might be differences of opinion as to what constitutes the elements of a "protection" forest. To place an economic evaluation upon this form of utility is extremely difficult. Absence of a forest cover, or vegetative cover of some sort, certainly is a disutility producing social costs, but the private owner can hardly be expected to bear all the cost of such a social gain. The control of fire will permit a vegetative cover to mantle land and reduce flashy runoff. A high vegetative, or forest cover, as compared to a low cover, such as grass, reduces the rate of snowmelt. This contributes to minimizing the effects of swollen stream channels. The primary requisite for streamflow control is protection from fire, be the vegetation of a high or low order, but the public has not fully assumed its responsibilities in this field.

In maintaining a forest cover through the practice of forestry, by providing recreational facilities and a suitable habitat for game, the private owner also produces a utility for which he is rarely compensated. His satisfactions are usually psychic; seldom are they economic. A few owners of forest land are able to capitalize on the game that is produced by carefully managing the forest environment. These owners, however, constitute a very small minority of the forest owners. Game is a disutility when hunters ignore property rights.

Continuous timber production as stabilizer of communities dependent upon forest products industries represents a social gain that can also be regarded as a utility. Industrial exploitation of stands of timber has not infrequently stranded communities and created "ghost towns." But the practice of forestry by private forest owners is invariably associated with economic gain. Forest land is a form of wealth. As an economic good, subject to private ownership, our economy vests in the owner exclusive control, but the lumberman is also subject to the problem of costs versus income. Enterprisers in the forest products industries are now constantly on the defensive in an effort to provide adequate raw material for their manufacturing units. Some of the larger industrial units have made a conscious choice between reducing the output of their manufacturing plant in order to assure themselves of a continuous supply of raw material in the future and limiting the life of the industrial operation because of excessive present use of timber supplies. When confronted with this issue, some owners have decided to liquidate the operation in a few years. In other cases, industrialists defer making a choice in the hope that some fortuitous circumstance will enable them to obtain raw material indefinitely without foregoing a reduction in present income.

Although some units of the large commercial forest products industries wish to continue timber processing for an indefinite period, they do not own all the private forest land; in fact, they own less than two-fifths of it.[16] Three-fifths of the

[15] *Report of the Forester*, 1941, p. 13.

[16] *Forest Lands of the United States*, Report of the Joint Committee on Forestry, Congress of the United States, Document 32, 77th Congress, Wa

forest land is owned by non-industrialists, chief of whom are farmers. Many of the forest products industries have a high discount rate, but certainly many of the non-industrial owners also have high time-preference. Both groups of owners are continually confronted by the danger of forest fires. The fact that the Forest Service has reported that 80 per cent of the privately-owned commercial forest land receives protection from fire does not mean that the protection is adequate. In many instances the protection is woefully inadequate.

If there is a social gain from the practices of forest conservation, then the public should be willing to bear the costs commensurate with the derived utility. The relationship of the public to forest conservation has been expressed very well by de Viti de Marco:

"As long as the owner finds the cultivation of forests profitable, he will preserve the forests, and in so doing, he offers a free utility to the community. At the moment, however, in which (whether because of the high price of timber or because there is profit in changing to another form of cultivation or because of difficulties of his private affairs) he finds it convenient to cut down the forest there is evidenced a contrast between the interest of the proprietor and the interest of the community.

"The contrast can be described precisely as follows The cost of maintaining the forest is borne exclusively by the proprietor, who sets against this cost only the private utility to be derived from the timber and pasturage, and does not take account of the public utility as such. For this reason, the moment that it is to his interest to cut down the forest, society must assume that part of the cost to which the public utility corresponds. Only then is the economic calculation complete.

"The state, then, intervenes in order to defend the community against the damages which may follow the cutting down of a given category of forest. It does so in two ways: (a) by keeping and not selling the forests in its possession, and if need be, declaring them inalienable; or (b) by subjecting shelter forests to forest restrictions, whereby proprietors must manage their forests rationally, with periodic cuttings, and must not destroy them.

"In the first case, the conflict of interest between the system of private ownership of forests and collective wants disappears automatically. The community bears the whole cost, and enjoys all the utility. And if, as has been said, the state is not a bad forester, it will have no losses. But even if it should obtain a smaller return than a private owner would obtain, this loss would be regarded as part of the cost of producing the public utility obtained from the forest.

"In the second case, the forestry law, in imposing restrictions, recognizes, or should recognize, the proprietor's right to compensation. The compensation is merely that part of the cost which the state assumes in order to preserve the public utility of the private forest."[17]

Part of our political economy to date was created to encourage private owners of forest land to practice forest conservation by providing assistance in the prevention and control of forest fires. In a half-hearted, grudging sort of way, Congress, through the Clarke-McNary Law, made possible the annual expenditure of not more than $2,500,000 for protection from forest fires. Aid in this activity is clearly a public function primarily to prevent destruction of life and property caused by the fires set by the public itself or by natural causes. This action also contributes to the protection of forest lands important for streamflow control. The Cooperative Farm Forestry Law of 1937 made possible some leadership in forest conservation on non-industrially-owned lands. The outstanding issue in current discussions on the political economy of forest conservation in the United States is whether the public is willing to compensate the owner for the utility it derives from private forests and, if the necessity for compensation is admitted, what the amount and method of payment should be.

[17] Antonio de Viti de Marco, *First Principles of Public Finance*, trans. from the Italian by Edith P. Marget (New York: 1936), pp. 73 and 74.

Report of the Joint Congressional Committee. In 1940 hearings were held on the subject of forestry by what was commonly referred to as the Joint Congressional Committee on Forestry. The recommendations of the committee[18] conformed almost entirely with those submitted to it by the Forest Service. The only important item omitted was that pertaining to the public regulation of the cutting on privately owned forest land. The outstanding recommendation, which the committee listed as its "Recommendation No. 1," pertained to cooperation between the federal government and private owners. The report offered greater inducement to practice forestry by recommending that $10,000,000 be made available annually for cooperative forest fire protection instead of $2,500,000 as specified in the Clarke-McNary Law's Section 2.

Other recommendations of some significance pertained to the leasing of private land by the federal government. It was an adaptation of the Forest Restoration Bill referred to previously in this paper. Federal forest land acquisition was treated lightly and dismissed with: "Federal forest land acquisition in our national forests should continue at its present rate and when possible should be accelerated."[19] Obviously, the Joint Congressional Committee chose to follow the policy expressed by Graves in 1919. The committee was cool toward much more federal acquisition of forest land and ignored entirely the proposal of the Forest Service to regulate the cutting on privately owned forest land.

Subsequent to the appearance of the Report of the Joint Congressional Committee on Forestry, the chairman of the committee introduced into the Senate a bill with the preamble, "to effectuate the recommendation of the Joint Congressional Committee on Forestry submitted to Congress . . . "[20] Strangely enough, Title I of the bill was "State Regulation of Private Forest Lands," an item that the Joint Congressional Committee carefully avoided. With two minor exceptions, Senate Bill 2043 proposed to implement the recommendations submitted by the Forest Service to the Joint Congressional Forestry Committee.

In 1943, at the 1st Session of the 78th Congress, another bill was introduced into the Senate by Mr. Wallgren.[21] It, too, purported "to further the conservation and proper use of the forest resources of the Nation and to effectuate the recommendation of the Joint Congressional Committee on Forestry submitted to the Congress."[22]

It is very questionable whether the Forest Service can justify its present program, which places so much emphasis on public regulation of private cutting and greater aid to private owners in forest fire protection. If cuttings on all commercial private lands were regulated, eventually there may be as much of a timber surplus as there has been an excess of agricultural commodities. A forester of high professional attainments has already pointed out that approximately 100,000,000 acres of commercial forest land could supply all the forest requirements of the United States, if those lands were well managed after they had attained full productivity.[23] What inducement is there, furthermore, under present circumstances, for a private owner to practice forest conservation in regions that do not have an en-

[18] *Forest Lands of the United States*, Report of the Joint Committee on Forestry, Congress of the United States, Document 32, 77th Congress, Washington, 1941.

[19] *Ibid.*

[20] Senate Bill, 2043, 77th Congress, 1st Session; p. 1.

[21] Senate Bill 1330, 78th Congress, 1st Session.

[22] *Ibid.*, p. 1.

[23] G. A. Pearson, "Forest Land Use," *Journal of Forestry*, 38:261-270.

vironment conducive to growing species of trees in high commercial demand?

The Forest Service partly justified its present demand for regulation because the rate of depletion of timber is in excess of the rate of growth. This, the bureau says, is caused by private forest land owners not redeeming their social responsibilities by practicing forestry. They should, contends the Forest Service, be compelled to practice forestry so that eventually the timber growth will be at least in balance with the drain. The Forest Service proposal for public ownership of half the commercial forest land is further based on the grounds that on the 340,909,000 acres of privately-owned commercial forest land, only 20.5 per cent is under management of some sort.[24] Only 7 per cent of the private timberland is under intensive management. On the other hand, all national forest land is under some form of management and so is most of the other publicly owned commercial forest land. There is the inference that the public—particularly the federal government—is a superior proprietor of forest land and should be made custodian of much more land to achieve the desirable social gain.

In his discussion of the goals to be sought in a land use policy, Wehrwein has stated an objective that the Forest Service could well adopt:

> "The goal of forest policy should be to retain as much land in 'protective' forests as required for these purposes (watershed protection, flood control, prevention of erosion). How much this shall be will depend upon the conclusions of foresters, engineers, and physical scientists. Insofar as these uses are of public concern with little or no income, the ownership will largely be public (the worst-first theory). With few exceptions, however, commercial and protective purposes are not exclusive and both can be accomplished by the same forest."[25]

[24] "Forestry on Private Timberland," *op. cit.*

Even though the Forest Service were to accept the goal as stated, the difficulty of making it effective would lie in the determination of "protective forest" areas. The fact that they might be difficult to determine should not interfere with an attempt to do so, even though foresters and engineers have had difficulty in accepting each other's viewpoints pertaining to the degree of influence that forest management and engineering works have upon streamflow control.

Opportunity—Not Restriction—Basis for Political Economy

Except for the enactment of the Cooperative Farm Forestry (Norris-Doxey) Law subsequent to the passage of the Clarke-McNary Law of 1924, there has been no federal legislation to provide inducements to private landowners to practice forestry. The public recognizes the merits of forest conservation, viz., what it contributes to our economy, safety and welfare. There is a utility and a social gain in the practice of forest conservation. If there is this social gain, then the public certainly should acquire at least the lands needed for streamflow control. This would resolve the argument of what the costs are and who should bear them. Lacking authority or funds to do this, then an economic inducement should be offered to private owners to practice forest conservation. Failure to obtain adequate streamflow control through a system of economic inducements would then justify public control with accompanying compensation for the removal of some of the sticks from the owner's bundle of rights.

On forest land that is unimportant from the standpoint of controlling streamflow it is difficult to understand how the Forest Service can propose regulation

[25] George S. Wehrwein, "Goals in Land Use Policy," *Journal of Farm Economics*, May, 1938, pp. 237-246.

without having demonstrated that a system of economic inducements will not accomplish the objective. Facts amassed by the Forest Service itself show that 20.5 per cent, or 70,007,000 acres, of privately-owned commercial forest land is under either extensive or intensive forest management. Add to this area the 81,479,000 acres of commercial forest land in national forests—and this excludes 15 million acres of commercial forest land administered by other federal agencies and 24 million acres in state, county and municipal ownership—there are today more than 150 million acres of commercial forest lands under forest management. It is reasonable to believe that, given the facts to demonstrate the economic advantage of practicing forestry and adequate leadership, many more forest landowners will use voluntarily the practices that the Forest Service proposes they should be compelled to do. There has to date been too little on-the-ground leadership offered to private forest landowners and inadequate economic stimuli to expect more than what has taken place.

In a recent Forest Service publication appears the statement:

"About 15 years ago a conscious choice was made between public cooperation and public controls. Cooperation has since been under trial. It has made progress. But there is still a long way to go. There is urgent need, now, for progress to be speeded up in the public interest."[26]

The technique for the speed-up is public controls; yet in the 15-year period referred to, public assistance in forest fire protection has been inadequate. This inadequacy has been admitted by the recommendation of the Forest Service to increase the maximum amount of federal funds for protection from $2,500,000 to $10,000,000 annually. Some progress has been made through the Norris-Doxey Law. But the economic stimuli, long ago recognized by Graves as being necessary for a substantial response by private landowners, is still lacking.

The men who have headed the principal federal governmental forest bureau, the Forest Service, since 1935 have consistently supported forestry regulatory legislation. F. A. Silcox, chief forester from 1933 to 1939, did so in a mild way. His successor, Earl Clapp, acting chief from 1939 to 1943, did so in no uncertain terms.[27] The recently appointed Chief Forester, Lyle Watts, has also gone on record as being favorable to public regulation. In his address, Watts said:

"In order that nation-wide regulation of cutting practices may come promptly and be reasonably uniform in standards and enforcement, federal legislation is needed. This should, as a minimum, prescribe standards for required forest practices and authorize the Secretary of Agriculture (1) to determine whether practices adopted by the states conform to such standards; (2) to inspect enforcement of state laws; and (3) to take direct action where suitable state legislation is not enacted and where enforcement of the practices established is not adequate."[28]

The professional foresters who formulate policies for the Forest Service undoubtedly propose the use of the government's police powers to obtain forest conservation because they believe that it is the only means that remains for doing a necessary job in the minimum of time. They are aware that the nationalization of forest lands made titanic strides when no out-of-pocket costs were involved, but as soon as progress in forest conservation required funds from the public treasury for land acquisition, progress slowed precipitously. Forest conservation through land nationalization has not

[26] "Summary of Recommendations Presented by the Forest Service on February 16, 1940, to the Joint Congressional Committee on Forestry with Respect to a Forest Program for the United States," mimeographed, March, 1940, p. 24.

[27] "Report of the Chief of the Forest Service," Annual, 1940, 1941, 1942.

[28] Lyle F. Watts, "Comprehensive Forest Policy Indispensable," *Journal of Forestry*, 41: 1943, p. 787.

been popular. The Forest Service regards promotive measures as inadequate. With government moving into the economic sphere as it has, starting in 1933, the Forest Service probably felt that here was an opportunity not to be missed. Because the proposed federal legislation rests so heavily upon public regulation, it seems appropriate to offer a comment on the subject of public controls:

"To the extent that the representative system, through the default of the middle class in its constituencies, arrives at a point where the representative has only a vacuum, an emotion or a special interest to represent, national policy-making will be increasingly done by the executive with the advice of his experts . . . Their interest is inclined to be in *goals* for democracy rather than in *methods* of democracy. An executive program made in such a mood is in constant danger of crossing the line from being government by, to becoming government for, the people."[29] (Italics added.)

It is understandable that Silcox and Clapp should support coercive rather than promotive measures. With the advent of the New Deal administration, conceived in the midst of economic stagnation, the trend was toward centralization of authority and dependence upon government for economic security. The present war has demonstrated that, given the necessary stimulus, our economy has retained a surprising amount of resilience. Progress has been made in forest conservation in spite of inadequate public assistance in protection, extremely meager economic inducement, and the absence of public control of cutting. With more public assistance in protection from fires and other natural agencies and with some economic inducement to practice forest conservation, surely progress will be made at a rate greater than that achieved in the past. As Gideonese has stated it so well:

"The sober fact remains that, in our search for policies of control, we have been far more successful in equipping the social arsenal with restrictive weapons than with devices that will stimulate activity."[30]

Possibly regulation—the guiding hand of a central authority or Tugwellian institutionalism—is the direction in which society is moving. But we resisted fascism and nazism because it meant regimentation, the end of individual liberty, and invalidation of the Bill of Rights. Until our political institutions are altered, the political economy of forest conservation should place more emphasis upon opportunity for enterprise through adequate incentives.

Where private forest land ownership unquestionably menaces life, health and property because it results in inadequate streamflow control—avoidable through the practice of forest conservation—then the public should acquire title to such land. Adequate public protection from destructive natural agencies should be provided for all forest land. For private forest land not directly affecting streamflow control and not contributing to the menace to life, health and property by floods and inadequate streamflow control, public regulation is not now justifiable. What is needed is the sort of political economy that will keep open the path of opportunity to enable private forest landowners to help themselves if they so wish. Landowners who wish to practice forest conservation should be aided in their efforts to attain their objective through incentives. If, after private landowners have been offered adequate inducements to practice forest conservation, timber production still remains below requirements for national welfare, then—and then only—will coercion be justified.

[29] M. L. Wilson, *Democracy Has Roots* (New York: Carrick & Evans, Inc., 1939).

[30] Harry D. Gideonese, *Organized Scarcity and Public Policy* (Chicago: University of Chicago Press, 1939), p. 50.

The German TVA

By WARNER F. BROOK*

THOUGH it may sound paradoxical, war and especially the blitz can be and actually is a stimulant to true planning. The Rhine-Ruhr industrial area at this time is one of the most bombed regions of the world. Nonetheless, there can be little doubt that after the war that region, a great reservoir for the economic resources of Central and Western Europe, will play an enormous part in European reconstruction. The most audacious dreams of such planners of Western Germany as Hugo Stinnes, coal magnate, Gerstein, civil servant, or Robert Schmidt, one-time president of the German Town Planning Academy and leader of the Ruhr Planning Authority, may reach fulfillment. The area will not be reconstructed in its pre-war configuration of industrial settlement, housing, and transportation. The war has destroyed the impedimenta of traditional political administrative borders between independent territories, provinces, and municipal units just as it has erased the vested interests represented by private factories. The land pattern of the Ruhr district is no longer limited by its former rigid and irrational network of transport routes.

The idea of a plan for this area was conceived in Imperial Germany but the work of the Authority was mainly the work of the Weimar Republic. The planning group was handicapped by its relatively limited geographical range. But it now seems likely that the main objective of the Prussian Authority Law (the overall plan from 1920 for integrating geographical, economic, and social aims) will re-appear during the period of post-war reconstruction.

The experience of the Rhine Ruhr Authority may be of considerable value as an example of how large-scale planning can deal with the obstacles which beset planning efforts. For instance, a really *planned* incorporation of the surrounding urban and rural districts into central cities, such as Essen, Duisburg, Dortmund, Bochum, Wuppertal, Hagen, Hamborn, was not completed because of the jealousies and ambitions of the mayors, or *oberbuergermeisters*, who were elected for twelve years, and were then usually re-elected. The process of incorporating outlying areas into the cities meant increased populations which in turn added immeasurably to the political stature of the mayors of such cities. Political influences through lobbying in the Prussian Diet were very decisive in aggravating the incorporation mania. In addition, insofar as many of these plans failed to consider towns as centers of industrial life, haphazard reservoirs of population were created and unemployment became a problem of great importance to the enlarged towns.

Historical and Geographical Background

Germany's greatest industrial center, Rhineland and Westphalia, is at the same time the largest in continental Europe. As its name indicates, its

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political location is in two Prussian Provinces of pre-Nazi Germany. The Nazis have subdivided these provinces into six administrative districts (*Gaue*) and the *Reichsgau Saar*, which is a union of a former part of the Rhine Province and the Palatinate. However, the industrial significance of the region is enhanced by the fact that in this area natural resources are used for the production of main sources of power which radiate into a far greater geographical area. This generated power stretches beyond the borders of other political territories such as Hanover, Hessen, the Rhinē-Main industrial area and the Saar Basin. The Ruhr district on the other hand also receives power from sources outside its political boundaries. A system of natural and artificial waterways connects the industrial center with the main German regions of industrial production, processing, and consumption.

It is one of the achievements of the Prussian state during the period of the Weimar Reich that it did attack the problems which arose as the continuously changing industrial situation conflicted with the traditional politico-geographical divisions of administration. The activities of national administrative agencies of the municipalities overlapped in every field of work, such as in the location of industry as well as the building of roads, communications, and public utilities.

Before 1920 municipal communities were the only legal agents through which "siedlungstechnische" planning (for industrial location, housing, power, and transportation in Germany) could be put into effect.

Under the Prussian law of 1920 which created the Ruhr Authority many decisions pertaining to industrial development were taken out of the hands of the regular administrative chiefs, the political and communal governors of the provinces, the subgovernors, and the heads of the local governmental and municipal agencies. Even collateral parliamentarian bodies were deprived of power. A special Authority legally equipped *with parliamentary or legislative powers and with executive power to enforce the law* was set up. Generally, however, the executive organization of the regular political administration and its parliamentarian bodies carried out most of the detailed decisions of the planning organization. A spirit of cooperation accompanied the first work of the Authority from 1924 to 1933. The first interruption after its foundation in 1920 came when the Ruhr was occupied by French and Belgian forces. This occupation disrupted the work of the Authority from the end of 1922 to 1924.

In 1933 the Authority embraced an area of about 5,000 square kilometers and included a population of nearly five million inhabitants. The east-west distance by airway was about 110 kilometers, while that of the north-south was 35 kilometers. This was greater than the original area established in 1920.

The area of the Authority originally extended between the two tributaries of the Rhine: the Lippe on the north and both banks of the river Ruhr in the south. The Rhine, including territories on its western bank, was the boundary of the area on the west.

Coal mining locations influenced the economic and social delineation of the district. The southern pits were nearly exhausted and the north and east had been very considerably exploited. Furthermore, the natural strata of coal below the Rhine and extending beyond its left bank opened new possibilities. The former arterial of political administration and communication was entirely inadequate for the new industrial topography.

Another factor which added much to the change in the configuration of the district and which actually had led to the establishment of the Authority was the great migration from the east to the west. Great coal mines and other works (e. g., cement) had to be closed. The inhabitants of Beckum migrated from Westphalia to the Rhine. The favorable freight situation lowered production costs greatly. This migration was alleviated by the fact that all coal mines belong to one large coal cartel (the *Ruhrkohlen* syndicate) so that the quota of the eastern pits was added to that of the pits near the Rhine. The same situation occurred at the cement works of the great cement syndicate. Incidentally, the Prussian State was a member of some of the large cartels.

The many towns of the *Ruhrkohlen* Authority and adjacent regions were highly populated: for instance; Cologne, 780,000; Essen, 671,000; Dortmund, 550,000; Duisburg, 440,000; Wuppertal, 408,000; Gelsenkirchen, 333,000; Bochum, 315,000; Oberhausen, 200,000; Krefeld, 180,000; Aachen, 170,000; Soligen, 140,000; Munster, 139,000; Wanne-Eikel, 100,000; Recklinghausen, 90,000; Bottrop, 86,000; Wattenscheid, 62,000; and Hamm, 55,000. Industrial Rhineland-Wesphalia had the greatest density of population in Germany.

Industry was the determining factor in the growth of the former villages of Rhineland and Westphalia. In 1816 Dortmund had less then 5,000; Bochum, Essen, Muehlheim (Ruhr) less than 2,500 and Gelsenkirchen had no more than 614 inhabitants. The increase in population was due largely to immigration from east Germany and Russia. With the increase in population, the ethnological character of Rhineland and Westphalia changed greatly. About 80 per cent of the miners are of Slavonic stock. That explains why before World War I some constituencies (among them Recklinghausen in Westphalia) send Polish members to the Prussian parliament. The immigrant from the rural east brought with him his natural bent toward agriculture and so the majority of the Ruhr miners also maintain small farms on the side.

Actual population statistics of cities in this district are no longer indicative of the real situation because there are no real boundaries to the cities. They run into each other. The concept of city or town loses its significance in an entirely unified industrial center.

The production of coal in Rhineland-Westphalia changed in the period between the two wars from about 70 per cent to 80 per cent of the entire output of the nation. The production of coke increased from 80 per cent to 90 per cent while the steel production of the Ruhr rose to two-thirds of the national total. Potential coal treasures have been estimated to be 55 billion tons east, and 10½ billion tons west of the Rhine. Furthermore, the west bank of the Rhine, near Cologne, contains one of Germany's greatest lignite fields.

At the time of the Franco-Belgian occupation, about 60 per cent of all workers in the German mines, 60 per cent of those in blast furnaces, 25 per cent in the German metal trades, and 33 per cent in the chemical industries, were in the occupied areas of Rhineland and Westphalia. About 55 per cent of Germany's rail and waterways traffic was in this section. And in addition to the above-mentioned industries, large portions of the chemical, metal, textile, cement, lumber, and paper industries were concentrated in this district.

Aims and Accomplishments

Among the aims (and accomplishments) of the Authority was the planned location of industries contiguous to the dwelling settlements, civic centers and great recreation grounds which were already equipped with utilities, transportation, and other public services. Among the problems encountered in zoning for factories, dwelling houses, and traffic veins was that of the distribution of the population. Also there was the task of establishing airports and an express train system in and through the district from Cologne to the center of Germany. New laws were enacted which provided for building permits, expropriation, and above all a coordinated set-up among the various administrative units of the cities, town and village corporations, and the powerful industrial works.

The principal electricity works providing power for the Ruhr district were the *Rheinisch Westfaelisches Elektrizitaetswerk*, founded by Hugo Stinnes, and the works at Westphalen and Mark. This power system included nearly all the producers and consumers of electrical power in the northern part of the province Rhineland and adjacent parts of Westphalia. This system was itself the result of a merger of a large number of formerly independent works. On its official board were representatives of industries and banks, fifteen mayors of large cities, and twenty-seven county chiefs. It was a typical combination of the "mixed public and private enterprise" which was developed particularly in Rhineland-Westphalia. According to its charter, 22 per cent of the stocks and shares must be in the hands of one or more communities.

Such "mixed public and private" enterprises were frequently set up as joint stock companies. In pre-Nazi Germany the supervisory board of the managerial committee of the joint stock company often represented the financial power behind the undertaking. Blockholders of shares predominated. In a mixed undertaking the power of state or community organizations was expressed by a capital majority. In frequent cases the sovereignty rights (e.g., utilities and transportation) were so strong that only a nominal sum was the public share in the capital of the joint stock enterprise.

The arrangements for the electrical system were developed in close cooperation with one of Germany's greatest financial institutes, the *Berliner Handelgesellschaft*. The Rheinisch Westfaelisches electrical works provided power not only for the northern part of the Ruhr district but also for the whole Muensterland which is a large part of Westphalia. In the year 1920, after a vain attempt to combine it with the Rheinisch Elektrizitaetswerk, the *Elektrizitaetswerk Westfalen* was joined with several communal power stations to create the *Kommunalen Elektrizitaetswerk-Verband Westfalen-Rhineland* in Hagen. These endeavors were in conformity to the main principles of the Authority.

Essentially the same persons acted together for the purpose of uniting the economic forces in the district. The Prussian *Landrat Gerstein* from Bochum had an influence on the formation of the central waterworks for the whole district. Here the greatest Rhine-Ruhr water corporation, the *Emschergenossenschaft*, was a "mixed public and private" enterprise. The water system included two great works, the Moehne and the Eder dams, even though they lay outside its official boundaries.

Great projects provided long-distance transmission for gas in connection with individual works. Plans for their extension far beyond the Ruhr-District,

covering essential regions of Western Germany, were in preparation when the Nazis came into power.

It is obvious that whatever government dominates Germany after the temporary occupation or the revolutionary post-war periods, economy in human and natural resources as well as in financial expenditures will call for a coordinated economic system or for large decentralized units. The Authority is an example of how a planning body can further these objectives of coordination.

Legal Setup of the Authority

The organizational structure of the Authority was: (1) *Verbandsversammlung* (Authority-parliament), (2) *Verbandsausschuss* (Authority-executive board), (3) *Verbandsdirektor* (Authority-director), (4) *Verbandsrat* (Authority - appeal board), and (5) *Verbandspraesident* (Authority - chief of governmental control).

The *Verbandsversammlung* (Authority-parliament) was considered its representative assembly. Originally it was composed of 172 members elected for four years. Half of this number was elected by the parliaments of towns and counties proportional to population. The other half represented the main branches of trade. Where public trade bodies or chambers existed they were authorized to elect members. Otherwise, the Prussian Minister of the Interior established special boards for the election and determined the number of delegates. In 1926 there were 28 members from the mining industry, 12 from the metal industry, 8 from building and construction, 12 from other trades and industries, 12 from agriculture and forestry, and 6 from craftsmen, 2 from railroads, and 2 from gas and electricity works. These delegates were elected by employers and employees in equal proportions. The director and his deputies prepared planning and legislation and performed the role of the permanent advisor to the assembly.

The *Verbandsausschuss* (Authority's executive board) consisted of 17 voting members, namely, the director and 17 members of the parliament. The latter members were chosen from communities and trade groups. The delegation from the trade groups was composed of an equal number of employers and employees. The communal chiefs of the provinces Rhineland and Westphalia were also permitted to be represented by delegates with non-voting power. The function of the executive board was the preparation and the execution of decisions of the parliament and the supervision of the management of the director.

The director, who had a staff of deputies and departmental heads, performed the current work of the Authority. In special cases he was entitled to make use of officials of counties, of the local police, and of community administrations.

The Authority's chief of governmental control represented the Prussian state as the governmental control agency in all technical matters for which his superior, the minister of social welfare, was responsible.

The *Verbandsrat* (Authority's Appeal Board) acted as one of the main boards of appeal from the decisions of the Authority. It was connected with the presidential office of the Authority. For appeals, individual courts of the Prussian State were designated. Otherwise the Prussian minister of social welfare had jurisdiction.

Among the activities of the general administration, the *Verbandspraesident* (Authority-chief of governmental control) exercised the functions of the police

power for building and carrying out the plans of zoning (mainly for building and roads). He was the commissioner of housing who backed the housing legislation of March 28, 1918. He was in charge of governmental funds to promote building of houses.

Future Planning?

After the Nazis came into power in 1933 and established the totalitarian purpose of directing the human and material resources of the Reich into a war machinery, the Ruhrkohlen Authority experiment was no longer one of the foremost European projects of planning for peaceful purposes. Surely the Nazis have made ample use of the project for war production. Likewise they have used many of the legal and technical achievements of the project to aid them in expanding this plan in order to cover Germany and the conquered countries with a network of strategical roads.

The economic and administrative centralization which has been accomplished for the Ruhr district through this planning authority will, no doubt, be an important factor for the victor-nations. Through this central authority will be distributed the most important products of German industry in the interest of European recovery. At the same time this wealthy district will be the main pledge or mortgage on German territory in the hands of the Allies. It is the monopolistic character of Germany's essential natural resources concentrated in a few geographical centers which facilitates this central control. The blitz will yet be a great catalyst for a complete replanning and redevelopment of that area.

Ratemaking Policies and Practices of the Public Service Commission of Wisconsin

By E. W. CLEMENS*

FOR many years Wisconsin has been regarded as one of the states that ranks above the rest in the effectiveness with which its public utilities have been regulated. Following the reorganization of the old Railroad Commission as the Public Service Commission in 1931 the state embarked upon a new era of utility regulation. David E. Lilienthal was brought in from out of the state as a member of the new commission. He served as an invigorating force in Wisconsin regulation. Due honor must be given, however, to the commission and staff members whose work was less spectacular but perhaps, in the long run, just as substantial.[1] With an effective law, adequate funds and a vigorous young personnel the new commission set out to overhaul the regulatory relations of every utility in the state so as to bring them under positive and aggressive control.

With a changing personnel and with changes in economic and political conditions the commission has not followed an even and consistent course since its reorganization in 1931. Characteristically its attention has never been uniformly dispersed among its various regulatory duties. Now one, now another phase of regulation would demand the bulk of the staff's time. The regulatory control of rates has been of necessity intermittent and even spasmodic. Pressure of other duties has at times been so great that effective rate regulation had to be foregone. Nevertheless the thirteen years that have elapsed have been significant ones in regulation and the policies and practices developed therein are worthy of review and consideration. The purpose of this paper will be to analyze the ratemaking policies and practices of the Wisconsin Commission since 1931 in light of certain general and well-known, albeit loosely defined principles of rate regulation.

No attempt will be made here to discuss the principles and problems of valuation, depreciation or rate of return. The vast amount of attention given to these problems and to the problem of the general rate level has served to obscure the almost equally important problem of the rate structure or relative class rates. It is unfortunate that so many commissions have failed to maintain full control over relative class rates and have thus abandoned not only their reasonable regulatory duties but also a source of tremendous regulatory power. The criticism is not applicable to the Wisconsin Commission, nor to other of the stronger commissions.

In general it might be said that the commission subjects the utilities to continuous regulation principally on the basis of book values. The depreciation reserve is generally taken as the measure

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[1] Among the staff members who greatly influenced the ratemaking policies and practices of the Commission for varying periods of time after its reorganization might be included E. W. Morehouse, chief of the rates and research division, G. C. Mathews, chief examiner; John H. Bickley, head of the accounting division and A. R. Colbert, his successor; Julius Krug, Hanina Zinder, Walter E. Baker, H. J. O'Leary, Barclay J. Sickler, Frank P. Hyer, Alvin Reis, George P. Steinmetz, W. E. Caine and others who were or have become well-known in the fields of public utility regulation or operation.

of depreciation if it approximates the actual depreciation allowances made by the commission. The normal rate of return is 6 per cent. Such returns might be less than those the courts would consider a fair return on a fair value and the possibility of judicial appeal, among other factors, serves to limit the negotiational power of the commission in informal proceedings.

Once the general level of rates has been determined the problem becomes one of holding class rates in line with each other or at least that of equitably apportioning reductions or increases among the various customer classes. Theoretically the Wisconsin Commission has been primarily motivated by considerations of relative costs in determining class rates. This involves the allocation of overhead costs by various procedures and frequently by mere rule of thumb. Since allocation involves so many question-begging assumptions the way is open to shade the procedure in line with expediency or other principles if not to abandon it entirely. Historical factors, social considerations, the existence or absence of competition, uniformity and simplicity of rate schedules, rates in other regions or communities, the value of service, elasticity of demand and the effect upon the financial condition of the utility might be included among the factors that have modified the use of the cost principle. It is also undoubtedly true that at all times all of these "principles" have been secondary to a certain shrewd and opportunistic desire on the part of the commission to whittle as much from the rate level as equitably possible.

The Cost of Service as a Ratemaking Principle

From among all the ratemaking principles considered here the commission has given predominant weight to the cost of service. The ambiguities of costing principles and practices have left the way open for modifications based on other factors but even where such other factors have obviously been considered the commission has generally justified its findings and orders with some reference to the cost of service. It is possible that such a stated regard for costs is reasoning after the fact.

The commission's adherence to the cost theory of ratemaking has by no means meant that rates have been based on elaborate cost allocation studies. Even the commission's large and well qualified staff would have been taxed beyond its capacity if scientific cost studies were made the prerequisites of all rate orders. In general it might be said that the utilization of cost studies has been inversely proportional to the length of service and experience of the staff members. The old Railroad Commission had made many cost studies in the twenties which were, however, of limited usefulness to the new commission under the changed economic and technological conditions. To meet such new conditions, and perhaps to gain experience, the new commission's staff made several notable allocation studies of telephone costs and of the costs of street lighting, rural and other varied electric services. Another important study was made of the allocation of water service costs between fire protection and general customers. The utilities also made several comprehensive studies, the results of which were available to the commission. Such studies were checked and modified. Although the primary value of these cost allocation studies accrued to those individuals making them, they nevertheless gave all the staff members a grasp of the cost factors involved and a rough but very practical

knowledge of the differentials that should exist between rates. In view of the uncertainties of cost allocation little more could be asked.

Even aside from the many concessions that must be made to other principles of rate making, rates can be made to conform to the cost of service only to a limited degree. A rate in perfect accordance with the cost of service would be so unwieldy and complicated as to be totally unacceptable to both the utilities and their customers.[2] Rate schedules should be relatively simple and few in number. In general, a particular schedule is designed for the typical customer of that class. The relative levels of class rates are determined by rough differentials between the average cost of service on a kilowatt-hour basis between the typical customers of each class. Such differentials give weight to typical demand, load and diversity factor characteristics, customer costs, elasticity of demand, competition, special equipment required, unusual conditions of service, etc. The principles of cost are assumed to apply not only to relative class rate schedules but over the entire reach of the individual schedules. Thus in the block-fixed charge rate for residential and commercial electric service specific customer costs are recovered in the fixed charge, demand and energy costs in the first blocks while incremental rates cover the incremental costs of service which are largely energy costs. Such practice results in rates which approximate the cost of service.

In respect to the marginal cost principle of ratemaking the commission has set forth the following principles:

"It is not sufficient, of course, to show merely that the rate is necessary to obtain the business. It must also be demonstrated that the great body of customers will benefit from obtaining this additional business. The principles which the commission has followed in approving gas house heating rates, as well as other competitive utility rates have been (1) such rates should not be any lower than necessary to obtain the business, (2) such rates must not be as low as the costs which are added by obtaining the new business, and (3) the rates should be sufficiently higher than those added costs to pay something towards the overhead costs which otherwise would have to be borne in total by the other customers."[3]

Regardless of the form of an ideal rate structure as determined by whatever might be termed "scientific cost allocations," such structures are historical institutions and take their form by growth. The new commission began its duties in 1931 when utilities had excess capacity and the need for downward rate adjustments was urgent. Any great amount of time spent on cost studies would have defeated the purposes of regulation. Even after the worst of the depression was over and business moved into the recovery phase, excess capacity was so great that ratemaking on a simple, added cost basis was both feasible and economically justifiable.

Thus, historically, marginal cost principles have modified rate structure that have been fundamentally based upon the cost of service. Further modifications have been introduced where the commission has been guided by other principles or towards differing objectives. The weight to be given to the cost of service is best evaluated by a consideration of these other principles which serve as limiting factors to the fundamental principle.

Value of Service as a Ratemaking Principle

"The value of service" is a question-begging phrase for it goes almost with-

[2] This has always been the objection to the scientific three-part Doherty rate for electric service. This rate recognizes separate customer, demand and energy costs. Even the much more simple rate forms which recognize demand characteristics have met with objections from the customers.

[3] *Re Alleged Gas Rate Discrimination, Madison Gas and Electric Company*, 14 PSCW 625, 627 (June 15, 1937).

out saying that there can be no absolute value of any particular service. Under these circumstances it is not surprising that the Wisconsin Commission has used the term, as well as that of "the ability to pay," to justify rate reductions that could hardly be justified under other principles.

The principle most frequently used was utilized as a theoretical justification of a reduction in rates to hold customers or revenues in cases where the utility was already earning less than a fair return. Many such reductions were of a voluntary nature during the first years of the depression of the thirties. Rural telephone companies in particular frequently sought rate reductions when disconnections drastically reduced their revenues. To some extent such reductions were successful.[4] The same reasoning was used to justify reductions in water rates. Because of the heavy customer investments in appliances gas and electric utilities did not face the prospects of such drastic losses in customers. Here, however, public criticism and dissatisfaction were sometimes sufficient to make the utilities concur voluntarily in reductions. The high minimum bill charges to rural customers were under particular pressure. Such pressure continued even after the depression had run its course and coupled with that from the rural cooperative movement, was sufficient to bring about voluntary reductions.[5]

In most cases rural telephone revenues were more vulnerable to the forces of depression than were urban telephone revenues and hence rural customers were more often the recipients of relief.[6] The fact that the telephone companies did not recover their rural business as rapidly as they recovered their urban business in later years was also the basis for preferential treatment of rural customers.[7] Such preferential treatment was assumed to rebound to the benefit of all customers. The commission was very emphatic in stating:

> "The Commission wishes it clearly understood that it does not thereby subscribe to the theory that one class of subscribers, especially rural, should have their rates determined solely on the basis of full allocation of costs. Telephone service consists of communication between persons. Both the urban resident and the farmer derive value from being able to communicate freely with each other. When consideration is given to value of service and the desirability of broadening communication possibilities between country and town, rates based upon a full allocation of costs may be higher than economically or socially justified."[8]

During the depression the principle was similarly applied to justify telephone rate reductions on the grounds that the decline in the number of stations had reduced the value of service to the remaining customers.[9] The commission was not unmindful of the fact that a reduction in the number of customers would increase unit maintenance and other costs but nevertheless felt that the value of service was more significant than its cost.[10]

[4] A study of a group of comparable telephone companies indicated that twelve companies which reduced rates during 1932 lost only 10.8 per cent of their stations, while fourteen companies which did not, lost 17.7 per cent of their stations. *State Wide Case, Wisconsin Telephone Company*, 4 PSCW 201, 319 (July 5, 1933).

[5] Cf., *Re Rural Rates, Wisconsin Hydro Electric Co.*, 19 PSCW 353 (July 7, 1938).

[6] From 1930 to 1933, urban business telephone stations declined 10.4%, urban residence stations, 18.6% and rural stations 32.2%. *Biennial Report*, 1932-1934, Public Service Commission of Wisconsin, p. 67.

[7] Cf., *Rural Rates, Wisconsin Telephone Co.*, 17 PSCW 493 (November 12, 1937).

[8] *Re Rates, Commonwealth Telephone Co.*, 16 PSCW 388, 393 (June 23, 1937) and also 20 PSCW 1, 7 (October 22, 1938). *Re Rural Rates, Wisconsin Telephone Co., Ibid.* p. 495.

[9] *Re Rural Rates, Wisconsin Telephone Co.*, 14 PSCW 162, 164 (November 5, 1936); *Dolan* v. *Commonwealth Telephone Co.*, 4 PSCW 100, 107 (June 6, 1933); *City of LaCrosse* v. *LaCrosse Telephone Co.*, 4 PSCW 730, 731 (September 25, 1933).

[10] *Re Rate Revision, Fremont Telephone Co.*, 10 PSCW 15, 18 (July 15, 1935); *State Wide Case, Wisconsin Telephone Co.*, 12 PSCW 1, 23 (March 24, 1936).

An inadequate maintenance policy which impaired service has been considered to be a factor in the justification of a rate reduction.[11] The commission has also considered mismanagement and inefficiency as reflected by excessive costs to be sufficient basis for a reduction in rates below cost to a level compatible with the value of service as evidenced by the rates charged by other utilities for comparable service.[12]

The value-of-service principle is applicable not only to the problems of relative class rates but also to the problem of the general rate level, although in the latter instance it comes more to be a problem of reasonable rate of return. In an ambitious and unsuccessful attempt at social ratemaking the Wisconsin Commission, in the famous Wisconsin Telephone Company case, sought to establish a significant relationship between the value of service and the depressed economic conditions which had decreased the incomes and purchasing power of consumers. Here the commission, after finding rates unreasonable on the basis of the cost of service, found them unreasonable for the additional reason that they were fixed during periods of high prices and a different level of income and thus now exceeded the value of service.[13] Subsequently the commission frequently supported its findings with reference to the decreased value of service arising out of the decline in consumer incomes.

Further ambiguity is added to the value-of-service principle by the fact that it is affected by access to alternative sources of service. In certain aspects differential ratemaking implies a recognition of the differing degrees of competition to which various classes of utility service are subject. To the extent that alternative sources of service are cheap or numerous, elasticity of demand is increased and the greater becomes the necessity of reducing prices. Since the demand price for any service is dependent upon the price of competing services and since the existence of joint costs makes it impossible to tie particular costs to particular services, it is apparent that the price structure of any complex group of intra-competing services is completely indeterminate. Conversely the fixing of any one rate automatically serves to determine price and demand for a competing service. The level of electric cooking rates, for example, serves as a determinant of the demand for gas service. Under such conditions the way is open for a regulatory agency to determine the extent to which the various kinds of service are utilized.

Although the rates and research department of the Wisconsin Commission has made outstanding studies of the nature of price-cost relationships of competing utility services, it has never engaged in any broad scale planning activities that might be expected to grow out of such activities. Such a procedure would be open to legal attack and it may well be questioned whether it would be even desirable. There is little evidence in the published reports that it has considered the effect of rate changes upon the demand for competing services rendered by other utilities not before the commission.[14] As a general practice the existing load of any utility has been considered the base load and additional

[11] As in *Russel* v. *Commonwealth Telephone Co.*, 3 PSCW 366, 370 (February 17, 1933).

[12] Cf., *City Gas Co. of Antigo, Rates, Practices*, 7 PSCW 16, 19 (July 27, 1934). Greater consideration to this factor is given in a later section.

[13] *State-Wide Case, Wisconsin Telephone Co.*, 2 PSCW 106, 243-4 (June 30, 1932).

[14] A commission staff member has informed the writer that the commission has given weight to the effect of particular utility rates upon the demand for competing services of other utilities, but such consideration is difficult to evaluate.

service has been extended on an added cost basis.

On the demand side the application of the value-of-service principle approaches competitive ratemaking. In many communities in the northern part of the state the demand for and the value of gas service is decreased by the low cost of firewood, a condition which does not exist in the southern cities. The value of electricity for heating and cooking depends to a degree upon the availability of gas. Although water is a necessity the value of the service may be limited by the customer's willingness to put down his own well. This is a material factor in conditioning rate changes in small communities. The cost of individual heating and power plants would have to be considered in determining industrial heating and power rates.[15] Telegraph and postage rates are admitted factors in telephone ratemaking.

"Implied" competition has been used in ratemaking. The commission has frequently considered, for example, the cost of power from an alternative source such as a Diesel plant in determining the reasonableness of a wholesale rate.[16] Conversely, where studies have indicated that the construction of an isolated Diesel plant was not economically justified, the commission has refused to allow such excess costs in the rate base.[17]

Where competition is actual, rather than potential, utilities may or may not be mindful of their own best interests. In any event the commission can stress such competition in negotiations seeking rates compatible with the "value of service". Where the competition is only potential, considerably more pressure may be necessary.

On the other hand the commission has been reluctant, if not opposed to raising rates for improvements in service. Such improvements have normally been taken as a matter of course. This has been its attitude in several cases towards the installation of common battery equipment to replace magneto sets in small telephone systems. A similar position has been taken in respect to the installation of handsets and other telephone improvements. Differentials between the classes of service exist, however, particularly where both services are rendered by the same utility.

In general it can be said that this principle sets one of the limits upon rates. In another sense it might be said that the commission has used this ambiguous phrase as an expedient means of justifying rate reductions where other bases were lacking.

Increasing the Use of Service

Increasing the use of service has probably been the most important single objective of the commission's ratemaking policy from 1931 to the beginning of the war. The application of the principle embraces more than the mere reduction of rates contemplated in the application of the value-of-service and cost-of-service principles. Fundamentally it is scientific ratemaking with the twin objectives of reducing rates and increasing revenues. To the extent that the former objective is achieved the consumer will admit the efficiency of rate regulation. To the extent that operating incomes are eventually increased the rate reduction is made more palatable to the utilities. Its sheer pragmatism is best illustrated by the fact that several of the special rate plans and rate structures instituted or

[15] Cf., for example *Hitchcock* v. *Wisconsin Power & Light Co.*, 5 PSCW 318, 327 (January 25, 1934).

[16] Cf., *Re Wholesale Energy Cost, Interstate Power Co. of Wisconsin*, 12 PSCW 494, 499 (May 12, 1936).

[17] Cf., for example *Re Elkhorn Electric and Water Utility, Installation of a Generating Plant*, 23 PSCW 268, 278 (December 31, 1940).

authorized by the commission are open to the claim that they are unjustly discriminatory.

In application the principle involves the well-known system of differential pricing by which the unit prices of successive blocks of service decline with increased use. This has been achieved by the practically universal introduction of the fixed charge-block rate for residential and commercial service and the Hopkinson type of rate for industrial gas, electric and water service where practicable. It goes almost without saying that the commission has opposed the room-count and flat types of rates for residential service. These rates were the most widely used types prior to 1933. The commission has even eliminated most low flat rates for special electric cooking and heating service although its opposition to such rates was largely based upon the discrimination involved.[18] For the same reasons the commission has gone along with the utilities in their opposition to the Wright type of rate for industrial customers, although such a rate, being a load factor rate, can best be made to conform to the cost of service.[19] Promotional rates were most effectively used in the case of electric service, but gas, water, steam heating and some transportation rates were also made promotional. Due to the decreasing cost-characteristics of utility services differential pricing is consistent with the cost-of-service principle. On the other hand telephone rates are subject to promotional ratemaking principles only to a limited degree due to the increasing cost of service.

The block-fixed-charge type of rate lends itself well to increasing the use of service. Despite opposition from some utilities who favored the minimum bill type of rate, the commission standardized this rate for residential gas and electric service. The initial fixed charge covering customer costs permits a lower first block than does the minimum bill rate and this promotional advantage was believed to offset whatever customer preference there might have been for the latter.

Promotional results can be obtained by setting up the size of the rate blocks to conform to the characteristics of the customer groups so that as large a number of customers as possible would receive a sharp reduction in the cost of additional service. In practice, however, it was frequently found more convenient to give effect to a rate reduction by reducing the size of the blocks.

The Wisconsin Commission has been fully aware of the log-jam resulting from the refusal of the utilities to cut rates until usage increased and of the customers' refusal to increase consumption until rates were cut. Since the development of demand is a gradual process, the speed of which depends partly upon rates charged, adherence to the fair-return principle serves to retard the increase in consumption to that optimum point where the customers might use the greatest amount of service under "equilibrium" conditions of a fair return. An alternative solution is that of more promotional pricing to increase consumption.

Depression declines in revenues, and public competition in some instances had caused some utilities in other states to institute bargain or objective rate plans prior to 1935. The results of these rate plans so impressed the commission that in January of 1935 it issued an order to

[18] Customers without electric ranges but with an equal consumption would pay higher rates.

[19] In the Wright rate any increase in demand or connected load will automatically increase the size of the blocks, and consumption being the same, will increase the unit price. The development of service is hence retarded. It is true that the same criticism applies to a somewhat lesser extent to the Hopkinson type of rate.

the Wisconsin electric utilities to show cause why certain tentatively outlined low cost rate plans for residential and commercial electric service should not be placed in effect. The plans had the following fundamental features: first, the basic existing rate which was applied to all customers who did not increase their use of service in any month over that of the same month in the preceding year; second, a low cross-over rate frequently two cents a kilowatt-hour, which applied to all consumption in excess of that of the same month in the preceding year; and third, an objective rate schedule, somewhat below the existing schedule, upon which the consumer was to be billed after his consumption had increased to the point where such a schedule would decrease his bill.[20]

Two utilities, both supplying electric and gas service, filed applications to place similar low cost rate plans in effect for gas service.[21] Although the commission issued no general order for a low cost gas rate plan it approved this plan and ordered the rate to be placed in effect.

The rates were open to possible attack as being discriminatory since customers using the same amounts of service could be billed different amounts. However, the ratepayers were so anxious to obtain any reductions whatsoever and the utilities were so eager to halt the decline in their revenues that no occasion arose to challenge the legality of the rates. Such rates generally halted the decline in consumption. The greatest criticism of the plan was that it disrupted the routine of the utilities' bookkeeping offices and increased commercial expenses at a time when the utilities were already earning less than a fair return. Many utilities were willing later to supersede their existing schedules and make the objective rate the standard rate in order to eliminate the bookkeeping expenses incident to "cross-over" billing of the "low cost" plan. Thus the objective rates generally became the standard rates of the utilities applying them. Such reductions were usually made voluntarily or after negotiation.

Also worthy of note among the plans for increasing consumption was that of one leading holding company system with considerable hydro-generating capacity. To meet the problem of a summer drop in consumption, residential, rural and commercial customers were permitted to use all the electricity they desired between the March and October meter-reading dates at cost no greater than that of the March bill. The companies thus preserved part of their revenues during the summer months while consumers were given a trial period of greater use of electricity. Although the plan met with considerable success from the company's standpoint, the commission did not give it its wholehearted approval because of the discrimination involved.[22]

On the other hand the commission ordered the elimination of the long-standing free lamp-renewal plan of the same companies. The plan dated back about twenty-five years when the manufacture of incandescent lamps was relatively new and the lamps were of poor quality. The plan had been encouraged by the old commission in order to improve the quality of service. The plan also had obvious promotional features but the commission thought it too dis-

[20] Cf., *In Re Low Cost Rate Plan for Electric Service*, 8 PSCW 195 (January 26, 1935); 9 PSCW 25 (April 18, 1935).

[21] *Re Wisconsin Public Service Corporation "Low-Cost" Gas Rate Plan*, 10 PSCW 259 (August 9, 1935).

[22] Re *Wisconsin Gas and Electric Co.—Electric Rate*, 9 PSCW 266, 274 (June 15, 1935). *City of Milwaukee* v. *The Milwaukee Electric Railway and Light Company*, 9 PSCW 280, 287 (June 15, 1935).

criminatory in that many customers did not avail themselves of these renewals and thereby felt themselves entitled to lower rates.[23]

The initiative in promoting street railway usage during the depression years apparently came first from the state's largest street railway system. Such efforts of the utilities were born of desperation since their revenues, already subject to a long downward secular trend, were decimated by the depression. The Milwaukee Electric Railway and Light Company devised a series of weekly, shoppers', and off-peak passes, recreational and mass-riding plans and an extremely liberal transfer policy.[24] These met with a measure of success. At any rate the company's revenues held up better than those of other similar utilities in other states, although it was later stated that shoppers' and weekly passes produced disappointing results.[25] The commission, after finding the plans non-discriminatory, went out of its way to commend the utility and urged the adoption of such plans upon other street railway companies.

In this instance, as in many others, the commission acted as a clearing house for the exchange of utility methods and practices. Obviously the commission's power in this capacity was circumscribed by the traditional dividing line between management and regulatory functions. The Wisconsin Commission, however, issued one order requiring another street railway company to show cause why similar promotional plans should not be placed in effect on its system.[26] But it seems that when regulation merges into management, as here it does, regulatory policies are best consumated in that vague hinterland of regulatory administration known as negotiational procedure.

The commission's desire to secure the widest possible dissemination of utility service has also influenced its policy in the allocation of rate reductions between customer classes. It seems to be true that rate reductions have frequently been given to customer groups whose demand was the most elastic and whose revenue might be expected to be the most responsive.[27] This policy generally redounded to the benefit of residential customers and as a result differentials got out of line. In recent years policy has shifted to restoring normal differential relationships with the consequent benefit of commercial and power customers.

Competitive Ratemaking by Rate Comparisons

In addition to the actual or "implied" competition discussed in the preceding section, utilities may be subject by formal or informal commission regulation to some of the competitive controls limiting private industry. These controls are circumscribed by the legal powers given to and limitations placed upon the regulatory body. In Wisconsin these controls have taken the form of rate comparisons and cost comparisons.

Rate comparisons constitute a form of pressure upon utilities whose rates are out of line with and above the general rates prevailing in surrounding territories. The significance of these comparisons has gone without sufficient recognition by ratemaking theorists who

[23] *Ibid.*

[24] *Application T.M.E.R. & L. Co. For Approval of Fare Schedules*, 1 PSCW 152 (September 3, 1931).

[25] *Citizens Booster Committee* v. *T.M.E.R. & T. Co.*, 23 PSCW 149, 155 (November 23, 1940).

[26] *Sauthoff* v. *Madison Railways Co.*, 3 PSCW 550 April 13, 1933).

[27] Thus in answering the plea of a municipality for a reduction in street lighting rates comparable to that received by other customers the commission pointed out that street lighting consumption had increased but 29 per cent in a seven year period while over the same period domestic consumption had increased 285 per cent. *Re Electric Rates, City of Menasha*, 20 PSCW 145, 152 (November 23, 1938).

were, for the most part, more interested in cost and value theories. The comparative rate studies compiled by the Federal Power Commission marked an important development in regulation although the actual value of these studies fell short of their potential value. Since 1933 Wisconsin Commission has made its own studies of various utility rates charged in Wisconsin communities and has made these studies available to interested parties including individuals, municipalities, journals and newspapers. To be effective such comparisons should receive the widest possible publicity. Most newspapers have not considered them to be newsworthy.

Customers are wont to look out of their backyards to see what their neighbors are paying. If the disparity is too great the ratepayers who suffer by the comparison will complain and the utility's public relations will deteriorate. Wisconsin is served by a number of utility companies who, because of their differing cost conditions and because of other reasons, maintain somewhat different rate levels. For better or worse the Wisconsin Commission has been adroit enough and aggressive enough to utilize such differences in securing rate reductions. Utilities are thus under pressure to drop their rates towards the lowest rates charged by any utility.[28] On the other hand the commission has been constrained to defend rate differences where it was felt that they were justified by cost or other conditions. Parenthetically, the state-wide integration of all utilities into a few systems which might result from the Public Utility Holding Company Act might reduce this type of competitive pressure upon the utilities.

The greatest pressure on utility rate structures comes from the state's vigorous municipal ownership movement. The state's indeterminate permit law, however imperfectly it has worked, furnishes a means by which municipalities can take over their utilities. The lower residential rates charged by Wisconsin municipal utilities tends to force all privately owned utilities to reduce their rates or face acquisition proceedings. Local politicians and Diesel engine agents have used rate comparisons to further the municipal ownership movement. The commission acts as an informal arbitrator between the disputing parties and may both extract rate reductions from the utility and counsel the municipality against an over-optimistic and unwise venture into municipal ownership. It must be pointed out, however, that both municipal and private utilities are under commission jurisdiction and that there is no evidence that the commission has either favored or opposed the municipal ownership movement as such. In specific cases their policy has been guided by their own impartial and rather comprehensive studies.

The advent of the Federal Rural Electrification Administration cooperatives with their low rural electric rates had a similar effect upon the rural rates of private utilities. It is probably true that rural rates have been forced below the cost of service, particularly on a six per cent rate of return basis. Urban consumers may thus be called upon to subsidize rural customers or, if the pressure of municipal "competition" is too

[28] For years the extremely low rates charged by one utility, operating under very efficient management and under favorable cost conditions, has placed pressure upon the rates charged by larger interconnected utilities operating in the surrounding territory under much more unfavorable cost conditions. This has been a factor in the municipal ownership movement in this territory. The utility most affected by such comparisons has been under particular pressure from municipal ownership groups and has both reduced its rates, frequently below a fair rate of return, and has lost its properties. However, the vigorous legal and political measures taken by the utility and its supporters have frequently and so effectively delayed acquisition proceedings that only a few properties have been lost.

great, the utility must take additional losses on its urban service. This pressure upon urban rates is made more severe by the fact that most municipal utilities have done little toward developing the unprofitable rural service. It is strange that critics who have always viewed rate differentiation (as made possible by the existence of overhead costs) as a means of extortion have been singularly uncognizant of the fact that by the same token the utility is subject to bargaining pressure that may wipe out profits completely. It is certainly true that many Wisconsin utilities have made voluntary rate reductions to particular rate groups when they were already earning less than a fair rate of return. Not the least significant factor in these reductions has been the customers' knowledge of lower rates charged elsewhere.

It must be pointed out that such comparisons cannot always be made, if they can be made at all, with complete justice to the utilities concerned. Many costs are beyond the control of the utility companies. Some rate comparisons might be taken to reflect upon the commission as well as upon the utilities concerned. It is true, however, that the commission has issued many rate and bill comparisons. These have resulted in pressures, sometimes reflected through the municipal ownership movement, which in turn have stimulated rate reductions that might not have been obtainable otherwise.

Competitive Ratemaking by Cost Comparisons

The Wisconsin Commission has not been willing to accept incurred or accrued expense as an unqualified basis for rates. Expenses must be reasonable, and one measure of reasonableness is the expense ratios of other utilities. Since utility customers are not interested in comparisons as such, competitive cost control is more formal than competitive rate control and is limited by the legal barriers to the commission's encroachment on the field of management.

To check the reasonableness of costs the commission's rates and research department has made a large number of surveys for its own guidance. The following might be included among the more notable made for electric utilities: a study of maintenance expense ratios, several studies of operating expenses on a per customer basis, studies of relative costs of hydro, steam and Diesel engine generating costs, a study of distribution costs, a study of the effects of tax-exemption on municipal utility costs, a study of the costs of purchasing and generating municipal utility costs and studies of service lives and salvage values of various types of equipment to be utilized in determining depreciation rates.

Among the studies made for other utilities are those of expense ratios of gas utilities, of expense and fixed capital ratios of telephone and water utilities and of the comparative costs of automatic and manual central telephone office operation. General studies have been made of the cost of bond, preferred stock and common stock capital.

Many of these studies have been made with the assistance of the commission's engineering department and others have been made by the utilities themselves. They have been useful guides to inquiry without being presumptively valid criteria of reasonableness. Even with their use thus qualified they have been invaluable and have been frequently used in modifying the rates of utilities before the commission.

Historical Considerations

It is frequently and unfortunately true that rate structures are as they are simply because they have always been

that way. Rate forms yield but slowly to the force of new conditions. This is due in part to managerial or administrative inertia and in part to the fact that rate forms can seldom if ever be substantially changed without increasing the bills of some customers.

When the commission was reorganized in 1931 it found rate structures of wide disparity of form and level throughout the state. The process of integration by which many local utilities were consolidated into larger systems during the twenties had not gone so far as to produce integrated rate structures. Utility rate structures were fantastic hodgepodges of many different schedules inherited from predecessor companies. These historical rate patterns were altered utility by utility and standardized rate forms were introduced throughout the state. The most notable of these forms was the block-fixed charge type of rate for domestic and commercial gas and electric customers. Standardization facilitated comparisons which in turn resulted in some pressure for rate reductions. It was also true that since a new rate form yielding equivalent revenues would have resulted invariably in increases to some customers, the process of revision was frequently and expediently coupled with a reduction in the general rate level so as to reduce the number of such instances to a minimum.

Not only were rate forms standardized and simplified but the commission also acted to reduce existing differentials among residential, commercial and industrial rates. Domestic consumers were in crying need of relief, in fact the reorganization of the commission was in part due to widespread dissatisfaction with utility rates. Some studies seemed to indicate that power rates were already too low. Utilities frequently regarded an industrial power plant within their territory as a blot on their escutcheon and made unwarranted rate concessions to get industrial consumers on their lines. Some of this ratemaking was done on an added cost basis which was no longer relevant after the utilities had to add new capacity. For one reason or another most municipal utilities maintained smaller differentials between the two customer classes although their rate differentials were likewise characterized by flagrant inequities in more than a few cases.

While it is true that the existing rate structures presented the commission with a ready-made opportunity to modify and revise rate schedules and forms in accordance with a sound, state-wide plan it is also true that the vigor with which the commission attacked the problem attested to its aggressiveness and ability.

Financial Structures

The much too often discussed problems of fair return and fair value are beyond the scope of this paper. In brief, it may be said that the Wisconsin Commission relies upon a fair return on book value as an administrative control of general rate levels. The weight given to book value is a matter for negotiation and hence rate regulation is partly by consent of the utilities. This of course is largely the fault of the courts and not of the commission.

Beyond the problems of the value of utility property are those of the financial structure. Despite all learned arguments to the contrary, financial structures do affect rate levels. During the period of temporary ratemaking the commission was primarily concerned with the effect of rate reductions upon the earnings available to meet fixed charges. Later many utilities escaped drastic and deserved rate reductions for no other reason than that their financial condition

was so precarious that the commission did not risk throwing them into bankruptcy by reducing their revenues. The commission has been fully cognizant of its statutory obligation to protect the credit of the utilities and the legitimate interests of utility investors.[29] It also is significantly true that an operating utility in bankruptcy is beyond the practical ratemaking jurisdiction of the commission.

For these reasons the commission has been sympathetic with the utilities in their desire to reduce their debt and fixed charges. The thirties saw a great deal of refinancing by the utilities that were in a position to take advantage of the then low interest rates. Such refinancing of course required commission approval. In such cases the commission was obliged to encourage refinancing but also utilized its power of approval as a means of securing rate reductions.

In those instances where fixed charges consisted of interest payments on advances from the holding company there was a decided conflict of interests between the holding company on one side and the commission and operating company on the other. The elimination of these interest payments improved the credit rating of the operating companies and relieved the pressure on operating management. From the commission's standpoint the companies became more amenable to negotiation of rate reductions since reductions would not cut into the "contractual" payments to the holding company.

Social Considerations

The lack of any unequivocal principles of differential ratemaking and the obvious social significance of public utility rates might presumably act to give regulatory commissions considerable freedom to fix rates on the basis of social considerations. Ever chary of value judgments, the Wisconsin Commission has, however, gingerly avoided almost all suggestions that rates might be fixed on this basis. Social planning has been limited to the simple objective of achieving the widest dissemination of utility service possible. Even where rate schedules have been set up apparently with social objectives in mind the commission has been careful to buttress its findings and orders upon costs or other bases. This may be but the result of the natural reluctance of a practical commission to venture out on the sea of value judgments or it may be an over-developed sense of respect for the great principle of "costs." It is also true that the commission operates within the limits of the powers granted to it by the legislature of the state. These powers include none which permit the pursuit of such social objectives as are attributed, for example, to the Tennessee Valley Authority.

Social policy would presumably dictate that residential users of utility service receive greater consideration than industrial users. There is little evidence, however, that even where residential consumers received preferential treatment in the distribution of rate reductions the treatment thus accorded them was either openly or tacitly based on social considerations. Preferential reductions in residential rates have been generally motivated by such factors as political considerations, exigencies of negotiational procedure and by the greater elasticity of demand for the service. Rationalizing, the commission might say that the residential load represented a backlog of demand that was invaluable to the utilities for its stability.

It must also be pointed out that the promotional rate schedules which re-

[29] Note *Re Application of Urban Telephone Company to Increase Rates*, 2 PSCW 440, 443 (October 4, 1932).

ceived so much of the commission's attention during depression years granted lower rates to large consumers. Thus a customer who can afford an electric range and a large number of electrical appliances pays less per kilowatt-hour than one who cannot. It is of course true that the promotional rate is justified by the cost characteristics of service and that the smallest users of service are not necessarily the lower income groups but are more likely to be convenience users.

Nowhere is the commission's skeptical attitude toward so-called social considerations better illustrated than in connection with wholesale rates for rural electric cooperatives. The political belief prevailing at the time that the farmers were entitled to a large share of the government largesses, the straightened financial circumstances of the rural electric cooperatives and the pressure from the Federal Rural Electrification Administration were all unavailing in altering the commission's disapproval of the general cent-and-a-half rate for wholesale service to the cooperatives.[30] In some instances municipal utilities voluntarily offered some rural cooperative wholesale rates which did not cover the costs of service only to meet with opposition from the commission. Where permission was granted to file such rates it was usually with the proviso that the loss incurred in rendering service would have to be met from the rate of return rather than from the revenues obtained from the ratepayers. It must also be pointed out that the rates demanded by the cooperatives were much lower than those charged the small purchasing municipal plants.

On the other hand, in an emergency reduction of rural rates of the Wisconsin Hydro Electric Company the commission did give the greatest reduction to customers with the highest minimum bills in the belief that it was justified by the existing depressed economic conditions and by the greatly depressed level of farm incomes. Here again, however, the commission was also motivated by other factors. The extremely high minimum bills of the affected customers were due to the rate form which was based on the number of customers connected to each transformer.[31]

Whereas the commission has been reluctant to base class rate differentials upon social considerations it has supported general rate reductions orders by reference to depressed economic conditions. The temporary rate reductions during the depression period of the thirties were justified in commission orders by the financial condition of the consumers. Such evidence was considered under protest in the previously mentioned Wisconsin Telephone Company case.[32] A later reduction in rates of the Wauwatosa Gas Company was similarly supported.[33]

Conclusion

To summarize: it can be said that the commission's ratemaking policy has been one of modified adherence to the cost-of-service principle formulated for practical purposes as rough rule of thumb differentials that are believed to exist between customer classes. In light of the arbitrary nature of costing methods the commission has been willing to depart from them in order to bring about the increased utilization of service. It

[30] Cf., *Particularly Wisconsin State Rural Electrification Coordination* v. *Wisconsin Public Service Corporation*, 13 PSCW 132, 136 (June 26, 1936).

[31] *Re Emergency Rate Reduction, Wisconsin Hydro Electric Company* 2 PSCW 377, 380 (August 23, 1932).

[32] *Wisconsin Telephone Company, State-Wide Case*, 2 PSCW 106 (June 30, 1932).

[33] *City of Wauwatosa* v. *Wauwatosa Gas Company*, 4 PSCW 431, 432 (July 26, 1933).

has been less willing to depart from such methods and principles to favor particular groups of customers for social reasons. Methods and principles have been subject to the practical exigencies of ratemaking by negotiation. Here the commission has been willing to take its rate reductions where it could find them. Historical rate patterns and considerations are significant in that the commission has altered them. The vigor of the commission is also shown by its use of comparisons and potential competition to subject the utility industry to a certain semblance of the discipline of competition.

The object of this paper has been the discussion of the problems focussing upon differential class rates. In this connection two points are worth reiteration. First, that many regulatory commissions in failing to retain complete control of particular class rates (in contrast to the general rate level as a whole) have surrendered one of their most important negotiational weapons. The Wisconsin commission is free of this criticism.

Second, too much attention can be given to marginal costs as a basis of differential pricing. In the long run all costs are marginal costs, and the extent to which a utility can take additional business on an additional cost basis is limited. Even the utilization of excess capacity to serve additional customers on an added cost basis means that such capacity will not be available when demand has expanded or when the fixed capital equipment has to be replaced. For this reason added costs are not so far below average costs as might otherwise be supposed. And it goes without saying that customers once added, and service once extended, cannot—from a practical standpoint—be abandoned once the utility's excess capacity has disappeared.

Technique of Urban Redevelopment: Part II. Combination and Large-Scale Initiative in Real Estate

By ARTHUR C. HOLDEN*

I. Need for Visualizing the Plan

IN September, 1666, when the great fire of London laid the heart of that city in ashes, Sir Christopher Wren offered a plan for the redesign of both streets and buildings that might have made London City the most efficient municipality of the modern world. His plan was not carried out, partly because it was said that there was no available fund large enough to finance the work, but principally because the merchants who had suffered the loss quite naturally insisted that their homes and places of business should be re-erected as quickly as possible upon the sites over which they controlled the rights.

Almost the same story followed most of the great conflagrations that have destroyed the physical hearts of many modern cities. Chicago suffered particularly because of the flimsy character of much of the rebuilding which was done under the pressure of haste.

Christopher Wren visualized a physical rebuilding far more orderly than that which actually took place.[1] Following other great disasters, architects have visualized schemes that sought to turn a common emergency into a common benefit. All such schemes have been rejected as impractical dreams. No one disputes the desirability of a planned physical rebuilding. Men have failed, however, to visualize the rebuilding of existing complicated contractual relationships. The merchants of London thought they had no funds to draw on because they looked in the wrong direction. The resources needed for reconstruction can be commanded only by the expected earning power of the redeveloped areas. Credit is based upon belief in the future, upon reasonable assumptions as to possible accomplishment, upon the vision and integrity of men who look to the future and plan for the future.

As a result of wartime bombing, large areas of European cities have been laid waste. In England there has been a recognition of the special problem created and steps have been taken to prevent reconstruction prior to the making of a comprehensive plan for redevelopment. Parliamentary legislation has greatly strengthened the jurisdiction of planning authorities and has authorized the drawing up of recommendations for the control of new developments. The report of the Uthwatt Commission has even gone so far as to recommend the use of the principle of expropriation to acquire the "development rights" of all properties so that a national planning authority might hold these rights and exercise control by preventing non-conforming developments and by granting permission to develop only when it is in accord with the national development program.[2]

Although they differ in method of application, the Uthwatt proposals are similar in purpose to those advocated by the Land Utilization Committee.[3]

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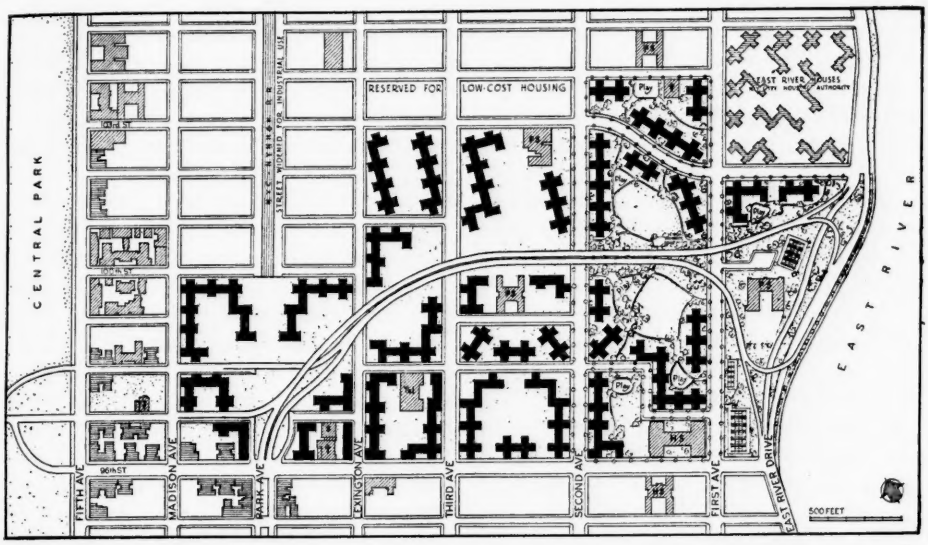
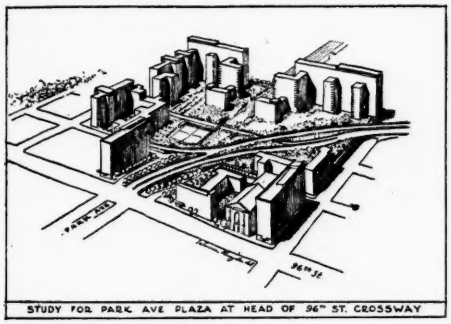
[1] C. Whitaker-Wilson, *Sir Christopher Wren, His Life and Times* (New York: McBride, 1932), pp. 101-102.

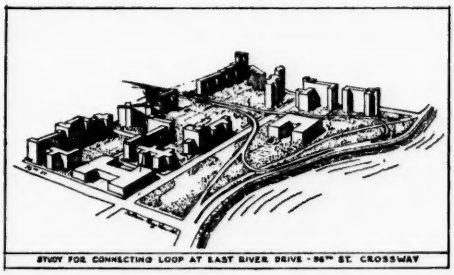
[2] Ministry of Works and Planning, *Final Report of the Expert Committee on Compensation and Betterment* (London, England: His Majesty's Stationery Office, 1942).

[3] See *Report of Land Utilization Committee to N. Y. Building Congress, Inc.*, March, 1938, "Problems Affecting Housing," also *Land Usage*, May-June, 1936.





STUDY FOR PARK AVE PLAZA AT HEAD OF 96TH ST. CROSSWAY



STUDY FOR CONNECTING LOOP AT EAST RIVER DRIVE - 96TH ST. CROSSWAY

These were given form in the New York Urban Redevelopment Act of 1941. The principle is recognized that individual property, especially after it has been subject to blighting influence, cannot be developed economically except in relation to a plan for the neighborhood of which it is a part.

We reproduce herewith a plan and two perspectives which suggest a desirable development for the blighted area discussed in the first section of this paper.[4] These physical changes are easier to visualize than the changes which must take place in contractual relationships. What we seek are improved ways for using properties which are now blighted. This means a transition in use, or a rearrangement of uses, and hence a change in contractual relationships. Perhaps we can best see what this means by following out some of the specific changes involved.

The Land Utilization proposals emphasize the need for combining the many interests which make up the local

[4] *The Journal of Land & Public Utility Economics*, May, 1944.

area or neighborhood. They recognize that the modern incorporated municipality has grown too big and too out of scale with the human unit to permit the individual property interest (or, for that matter, unorganized neighborhood interests) to receive the consideration which it formerly received in determining policies for the city. Therefore, the aim is to organize an area with the consent of a majority of property interests within that area, so that it may take the initiative. New York law now permits an urban redevelopment corporation, when authorized by the city plan commission and subject to its approval, to make a plan for the locality and to *compel* conformity to the plan on the part of the properties of the locality. The power of eminent domain may be utilized to take over that part[5] of property rights which may be in conflict with the accepted plan, or such as may be necessary to carry out the plan. This may or may not cause a hardship. For example, under existing zoning laws all properties in a district have the theoretical right to develop bulk or coverage to an intensity five times that existing, but, if all properties were able to exercise these full "rights" congestion and economic chaos might result. In practice, a few properties capture advantages and make use of "borrowed" light. Other properties are blanketed and suffer from obsolescence and depreciation. Through group planning open space may be equitably distributed and all properties enjoy protection. Eminent domain can be utilized to deprive recalcitrant property owners of the questionable "right" to build to the full limit of the zoning ordinance.

Obviously, planning on a group basis differs from planning by individual plots, since it recognizes that the *arrangement of uses* should be such as to promote the best interests of the group. This implies a *re*-arrangement of uses. To cite a specific example, the new plan may require a change in the location of premises used for shopping purposes. Let us say that this causes disturbance to a prosperous grocery store. The power of eminent domain may be invoked to take the tenancy of the store only. Compensation may be offered the owner for loss of rent. Since the tenant must move, the development corporation may provide in its plan for new and superior quarters for the grocery business and offer these quarters first to the displaced tenant. When the change of occupancy is effected, the corporation may offer the new real estate to the former owner in exchange for his original interest which has been disturbed by the redevelopment project. The plan may even provide, if it cannot be avoided, for temporary quarters prior to the location of the grocery store at its final point of vantage. Expropriation should be used as a means of compulsion but only as a last resort. The threat may be used to secure the use of temporary rights, limited rights, or all rights in real estate.

The technique of application is to handle the existing interests during the transitional period on the basis of a trusteeship. The trustee should appraise the properties received on a ratio basis and, after replanning, should reapportion and redistribute the properties on the basis of the established ratio of interest. To the layman "bankruptcy" may seem an ugly word but, basically bankruptcy is a form of trusteeship, administered by a technical expert with the sanction of the government and instituted to compose the conflicting claims of special interests with due regard to the interests of society. At the time of the

[5] See definition of "real estate" in Urban Redevelopment Corporations Act of 1941.

great fire of London, in 1666, had it been possible to realize the benefits that might have been gained by setting up a temporary receivership to *compose* the conflicting claims within the burned area, it might have been possible to proceed immediately with an appraisal and redistribution of property interests. Had this been done, the objection of the merchants who feared lest they be deprived of their means of livelihood, might have been cleared away. Christopher Wren's far-seeing plan for an improved and more efficient London City would then have depended merely upon finding the resources adequate to carry out the improvements.

The same misapprehension which troubled the London city merchants of 1666 affects us today. It never occurred to those traders, absorbed in their own distressing problems, that it would be possible to work out a *composition* of old obligations and to resolve these into participating rights in a city planned and built on improved lines. In the first place, they did not realize that it was possible to avoid the seemingly prohibitive expense of property acquisition by resorting to the process of composition. In the second place, they did not appear to realize that the resources for rebuilding were to be found in their own ability to put the property to profitable use and not in a great pool of liquid capital which appeared to be lacking.

In our own day, when property is sold for improvement, we have been accustomed to think it is the credit of the new owner which commands the resources that are needed to carry out the improvement.[6] The principal strength of the new owner becomes evident in the power to initiate. But in this day of corporate activity, we should recognize that the justification of the long-term credit is not so likely to be the strength of the new owner as the value shown by the improvement planned by the new owner. We should also recognize that the value of the improvement is based upon the value of its earning power and that the earning power is affected by the terms of the interest charge as well as by taxes. All who own an interest in property—whether it is the equity, the mortgage, or the tax interest—are dependent upon the earning ability of the property. The security for all of these interests alike rests upon earning power. The preferential relationship of these interests depends upon contracts and law. Consequently, if the existing ownership interests agree to compose their conflicting claims and act on the basis of a unified operation, there is no reason why they cannot qualify for the credit needed for improvement as easily as can a new owner taking possession after a transfer. The present diverse interests have not lacked resources but the power to make a decision, which is the first step to initiative. The 1941 Urban Redevelopment Corporations Act aims to establish a procedure by which existing interests may act together to reach a decision.

II. Examples of Large-Scale Development

Even after it has been demonstrated that machinery exists for the composition of existing interests and that the resources needed are derived from the property itself, it still remains difficult to convince existing owners to agree to participation in a group improvement.

In the first place, the proposed improvement itself is difficult to visualize. There are comparatively few examples of successful large-scale planning in existence today. The few that are to

[6] See A. C. Holden, *Money in Motion, the Social Function of Banking* (New York: Harper & Bros., 1940), pp. 11, 21, 27.

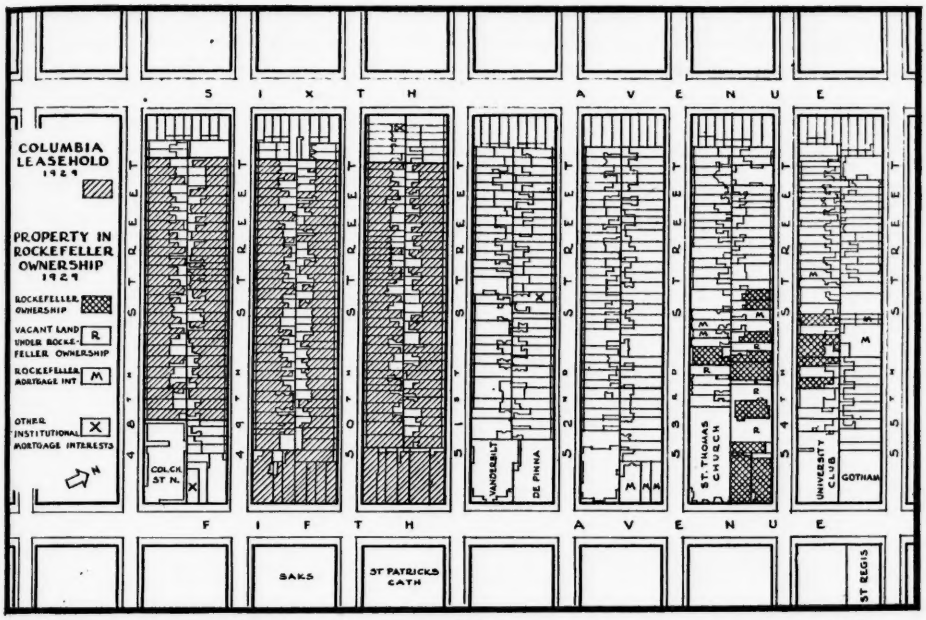
be seen in New York City appear almost completely unrelated to the idea of the redeveloped neighborhood. Rockefeller Center is a possible exception. It is a neighborhood, redeveloped along commercial lines. Thanks to the genius of its architects[7] it is planned on a group basis, but it is so closely associated in the popular mind with the financial strength of a single man that few people realize that other ownership interests are involved. Columbia University owns the land covered by the leasehold and the Metropolitan Life Insurance Society owns the mortgage which financed the construction of a large proportion of the improvements. The original landed interests have been almost completely displaced by John D. Rockefeller, Jr.

At about the time that Rockefeller Center was taking shape, John T. Flynn was writing the life of the elder Rockefeller.[8] Mr. Flynn makes very clear that the oil magnate was impelled by the resolve to profit by the economies that could be gained by stamping out the waste and inefficiency of small operators. In dealing with a competitor, the elder Rockefeller usually began by making a cash offer based on his own judgment of the value of his competitor's capital facilities to the Rockefeller enterprise. His cash offer was generally so low that it was indignantly refused. Mr. Rockefeller then offered the alternative of an exchange of stock ownership or the threat of merciless competition. As his business grew, he gained the power and ability to cause the ruin of most of those who refused to co-operate with him. *To those who agreed to co-operate he gave stock in his own companies,* and made them his business associates. Almost all of those who became early stockholders in the Rockefeller enterprise in time became wealthy men. There is every reason to suppose that the technique of stock participation, which was so successfully applied by John D. Rockefeller, Sr., to promote combination in the oil business, could be used successfully to promote combination in real estate.

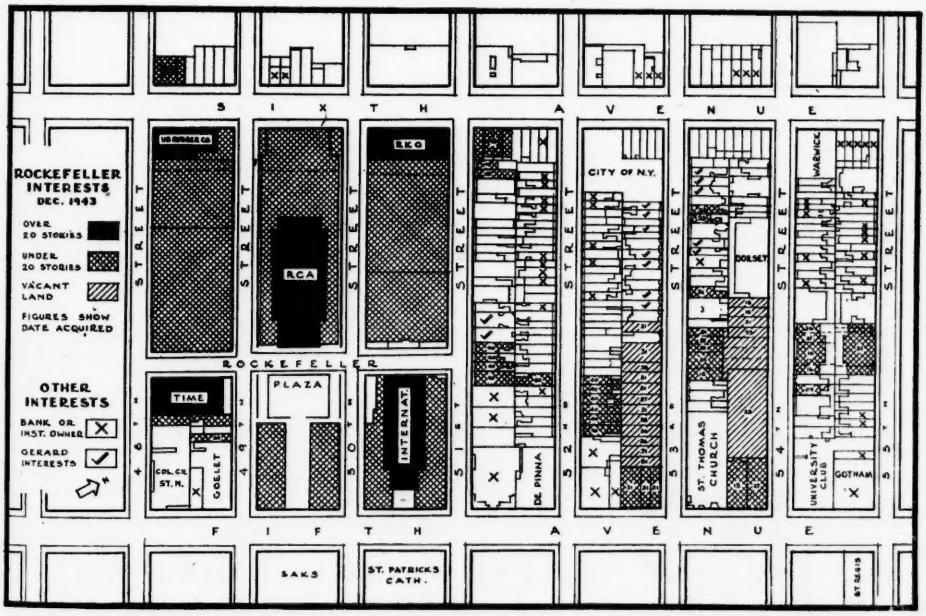
Willingness to sponsor a new opera house for New York drew the younger Rockefeller fortuitously into one of the greatest real estate enterprises ever organized without governmental aid. When he found himself committed to making good on the Columbia University leasehold, after others withdrew and the opera house project was abandoned, Mr. Rockefeller found that it was necessary to round out the site. He also found that the carrying charges on the indicated acquisition cost of the additional property, plus the annual rent to Columbia University, appeared to require a far more extensive development than originally contemplated. Apparently there was no one with experience in real estate to whom it seemed reasonable to recommend a technique for the combination of real estate similar to the technique that had been so successfully applied by the elder Rockefeller for combination in the oil business. Had it been possible to present to the existing interests in the area now dominated by Rockefeller Center *a visualization of both the physical plan and an enlightened financial plan for combination and reorganization,* it would have been possible to have included a much larger area on the basis of consolidation through stock interest. In this case the fixed capital charges would have been far less burdensome and the financial as well as physical benefits might have been far more widely distributed. The properties to

[7] The associated firms of Rheinhard & Hoffmeister; Corbett, Harrison & McMurray; and Raymond Hood and Andre Fouilhoux.

[8] John T. Flynn, *God's Gold, The Story of Rockefeller and His Times* (New York: Harcourt, Brace & Co., 1932).



MAP 1.—COLUMBIA UNIVERSITY LEASEHOLD: PROPERTY IN ROCKEFELLER OWNERSHIP, 1929.



MAP 2.—COLUMBIA UNIVERSITY LEASEHOLD: ROCKEFELLER INTERESTS, DECEMBER, 1943.

be included would have been appraised on a basis much nearer to their existing value and capitalized on that basis rather than upon the basis of expected speculative return.[9] Had the owners agreed to take stock distributed on the basis of a ratio appraisal, Rockefeller Center might have been developed more conservatively and facilities might have been offered to the public at lower rents. Lower rents would have broadened the market and afforded a greater possibility of a more natural step-by-step growth over a period of years.

Map 1 shows the Columbia University Leasehold in which Mr. Rockefeller acquired an interest in 1929 as a site for a proposed opera house. Prior to that time, the Rockefeller family had attempted to protect their residences in 54th Street by purchasing both equity and mortgage interests in the immediate neighborhood, as is shown on the map.

When Mr. Rockefeller was left with the entire responsibility for the Columbia Leasehold, he attempted to round out and consolidate his properties. (See Map 2.) He was not able to acquire the Sixth Avenue corners of the R.C.A. block until after the project was well under way.

A comprehensive replanning of the entire neighborhood, including the four northerly blocks, was prevented because Mr. Rockefeller was not able to purchase on an economic basis a few strategic properties in the intervening blocks. The use value of these "hold out" properties could have been more than compensated for by a general redistribution of space and use secured through comprehensive replanning of the district as a whole.

Could Mr. Rockefeller have had the benefit of the provisions of the Urban Redevelopment Corporations Law of 1941, he would have been able to deal with holdouts who prevented a larger Rockefeller Center. It is still possible that Rockefeller Center could be expanded by the technique of urban redevelopment. The owners of Rockefeller Center, as proprietors of a going corporation, might offer adjacent owners stock in a joint enterprise. They might offer cash on the basis of their estimate of the capital value of the adjacent properties to the existing corporation. If both propositions should be declined, the Rockefeller Center group is now strong enough to offer ruthless competition. As the Urban Redevelopment Law stands today, it would not be possible to resort to eminent domain unless it could be certified by the City Planning Commission that the area in question was substandard and unsanitary and suitable for redevelopment.

We must recognize that there are definite psychological obstacles to the assembly of property through the exchange of stock interests. In considering a composition of existing real estate interests, we must deal with corporate obligations and utilize corporate forms for reorganization. Unfortunately, the public has been left with very unhappy memories of the exploitation and manipulation of securities which characterized the boom period of the 1920's.

In 1939 an experienced realtor attempted to test the attitude of property owners in the Chelsea district of Manhattan toward an exchange of their equities for stock in a corporation which would undertake a project for the redevelopment of several blocks. He approached the subject point-blank and asked equity owners whether they would exchange their holdings for stock in such

[9] Market value of real estate, which is greatly influenced by expected speculative return, has influenced to a dangerous degree the "values" assessed against real estate for tax purposes.

a corporation. There were three types of answers. A few said they would be willing to do almost anything that was necessary to secure financial assistance. A few expressed interest but said that they were under the control of their mortgagee and could not see how they could adjust their mortgage obligation so as to have enough left to make such a proposition attractive.[10] A large number referred to the great London Terrace development in the Chelsea neighborhood and pointed out that stockholders and bondholders alike had had difficulties in reconciling the real values of their securities with their values on paper. They pointed out that too many people in the neighborhood had bought securities for hard cash (only to see them shrink in value) to have these same people ever again become willing to take stock in exchange for a physical asset such as real estate. Then in the next breath would come the remark, "Look at all the people who lost their money in cooperative apartments! No sir! We would not want to take stock in exchange for an equity in real estate."

It is clear that the losses which the public has suffered in real estate bonds and in the stock of so-called cooperative apartments have built up a deep-seated prejudice against a paper certificate of a participating interest in ownership. If, however, we review the capital structure of some of the real estate enterprises which resulted in loss to security holders, we can find in them an argument in favor of putting urban redevelopment projects together on the basis of an assignment of shares of interest rather than on the basis of purchase. In the sale of cooperative apartments the promoter sought a speculative profit from the supposed future land values. In New York City cooperatives were popular because the prospective well-to-do purchaser preferred to live in an apartment rather than in an individual private house but wished to own instead of rent.

Those who made appraisals for "cooperatives" acted on ideas inherited from what they believed to be valid experience. They believed first that when land was improved with a more intensive use, the value of the land itself was increased and that the total value of the improved real property approximated the new land value plus the building value. Calculations of this sort made it seem practicable to pay very high prices for land and then to borrow more money on the imputed "improved" value of the land plus the appraised value of the building. The value so determined was corrected, of course, often on the generous side, by a calculated capital value expressed as a reciprocal of the expected yield.

By this means speculators were able to "borrow out," even though the lending institutions were obliged by law to limit their mortgages to 66⅔% of values as appraised by "experts." The promoters of so-called cooperatives rewarded themselves for their speculative risk by asking the purchasers of cooperative apartments to contribute enough cash equity to approximately double the original promotional cash. This cash the promoters withdrew to repay their own advances and to "take their profits." Manipulations of this type did much to discredit the ownership of a stock interest in real estate. Because cooperatives were capitalized at excessive figures, more had to be continually paid out in interest and taxes than even very well-to-do cooperative owners could con-

[10] Limitations on space prevent the present author from elaborating on the matter of the composition of mortgage obligations although he believes that no discussion of the group redevelopment of properties is complete without it.

tinue to meet. *Had the improvements been made cooperatively by the original owners* without the need for financing the write-up of land values, the annual obligation for interest and amortization could have been kept down. The original cooperative owners might have sold their stock directly to the new owners and would have been able to do this with a reasonable margin of profit without causing the deceptive inflation of real estate values which was so typical of the promotional methods of the 1920's. Questionable practices in the field of consumer finance are usually an indication that all is not well with methods employed for financing production. Remembrances of discreditable manipulations in stock ownership, of course, present a psychological obstacle to suggestions for the issue of participating shares of interest in a joint cooperative enterprise in which owners might agree to pool their present holdings.

An obstacle is not less real because its basis is psychological. It is this sort of obstacle which faces those who favor large-scale or group method of production in the building industry. Such an obstacle can be disposed of only by a complete analysis and thorough understanding of the factors involved. Since there are virtually no existing examples of the type of development suggested, only assumed cases can be discussed.

III. Land Assembly Through Reapportionment of Participating Interests

To a great extent, the limits of what an owner will consent to do voluntarily are dependent upon what he may be compelled to do by the authority of the state. Urban redevelopment legislation has been the result of recognition that compulsion is required to prevent individual property interests from standing out against large-scale improvements of blighted areas.

The New York Law of 1941 grants the power of eminent domain to corporations organized under the law which control 51% of the real property within an area certified as suitable for redevelopment. This majority must include 51% of the land area as well as 51% of its value. Even where the majority of the property is acquired by the usual method of purchase, the power of eminent domain is an invaluable weapon for cutting red tape in difficult cases which might otherwise offer insuperable obstacles. Eminent domain furnishes the most speedy method for the transfer of title. Through eminent domain leases can be promptly terminated. Mortgages become a lien against the award rather than against the real property. All the complicated relationships due to unknown ownership, trusteeships for minors, undistributed interests, etc., can be quickly disassociated from real property through eminent domain. The awards of the court or commission sitting in condemnation proceedings are given in exchange for the property which is expropriated. Eminent domain is an effective method for getting real property out of the hands of parties who lack the power of decisive action.

The object of urban redevelopment is greater usability of real property from the point of view of both private and public interests. These interests are not separated, nor are they antagonistic; they are inter-related. The transfer of land from one ownership to another, or from private to public ownership, or vice versa, is a part of the general process of transition in use. The processes of transition are not always orderly. Urban redevelopment legislation seeks to reduce the hardships of the transition period. It seeks to set up an agency to acquire certain rights necessary to carry out a

group project and to compensate existing interests for losses that may be the result of the transformation in use. This agency may be the urban redevelopment corporation.

When 51% of the existing owners desire to create an agency through which they may act for the improvement of their district, they may join together in a pooling operation and form a redevelopment corporation. The self-evident advantage of property assembly through pooling over an assembly through purchase is that the former requires no large amount of new cash capital for its initial stage. The powers of the corporation are derived from the authority of the state and from contract with the municipality. It is not necessary for either the corporation or the municipality to take over *all* of the rights to *all* of the property involved or to pay compensation to existing interests on the basis of the total value of all parcels that become a part of the assembly.

Let us assume that a certain man owns four tenement houses on property measuring 100 x 100 feet, with accommodations for 96 families, and these are located in a blighted district in which a redevelopment is being planned. We will assume that this plot is appraised at a figure which amounts to 1% of the total value of the blighted district. Assume that the blighted district is replanned and public improvements are made which, while subtracting perhaps 10% from the area available for private development, nevertheless will increase the usability and desirability of the whole district and hence increase the value of the plots of which it is composed.

It is obvious that in order to get the full benefit of the replanning there must be a reapportionment of shares of interest among the original property owners. For that area of property which returns to public use, an equivalent of cash has been deposited with the redevelopment corporation to be held for the benefit of the participating interests. Hence, from the long-range viewpoint our original owner of a 100 x 100 feet tenement plot owns not that specific plot but a 1% interest in the corporation. This is equivalent to a 1% interest in the remaining real property plus a 1% interest in the cash capital. If, during the transitional period, the tenement owner remains in possession of his plot, he has to remember that the group as a whole has become a 10% partner in his real property and he himself a 1% partner in the cash of the group.

If the tenement house owner is displaced during the transitional period, it means that he would receive during the transitional period the use of space equivalent to that previously enjoyed or a payment equivalent to the value of the use of which he was deprived. In other words, to satisfy the particular tenement house owner during the transitional period involves a payment equal to his net gain or, if the property was in the red, a debit against the owner's current account.

Put into words, a transaction of this type sounds more complicated than it really is. The question may justly be asked, why complicate matters by stressing the point at all? Why not buy up such properties as are needed through open sale or, if the properties cannot be purchased without the exercise of eminent domain, then why not pay the awards in cash and get rid of the great number of conflicting individual interests that have been such an obstacle to replanning and rebuilding? There are two reasons for testing out the method under discussion.

The first reason is to clarify and extend the meaning of "just compensation." When the objective is replanning and

rebuilding, it is not necessary to take private property permanently. Redevelopment does, of necessity, cause an interruption of use. For the loss of use, "just compensation" can be given by the *substitution of facilities which will provide equivalent use* during the period of interruption and/or a credit or debit to compensate for the difference in the use value. Furthermore, after the transitional period "just compensation" can be given if *permanent facilities* can be provided which are equivalent to facilities formerly enjoyed. The test of equivalence may be (a) that the facilities are capable of furnishing equivalent use and/or (b) that the facilities offered as equivalent to each of the various interests are equitably apportioned to the original owners' shares of interest in the district as a whole.

The second reason for testing the method proposed is economic. Let us assume an award in eminent domain proceedings based upon an appraisal of the capital value of the property. The value of the award may have been determined after consideration of street facilities, sewer, water, gas, police protection, educational or other advantages which are available to the property. This may have little or no relation to the earning power or existing use of the property. The award may recognize the sound principle that the owner is the party, or the successor to the party, that has paid the proportionate share of assessments for benefit. We must recognize that the owner may have paid all or part of these charges irrespective of whether the use which he got out of the property was greater or less in value than the amounts paid. In other words, the owner may have paid more taxes than he could afford because he expected further advantages. Hence an award in condemnation may reflect either a capitalization of past advantages which have not been written off or a discounting of expected future advantages.

It is evident, therefore, that condemnation awards as well as sale prices are usually high enough to compensate the owner for giving up such potential advantages as he might have enjoyed had he undertaken the development himself. Thus the owner who waits and does not act gains an advantage in the possibility of a withdrawal paid for by the entrepreneur. This is capitalized in higher land cost. It means that choice of improvements will be more restricted and that higher rents must be sought to carry the improvements which are decided upon. From an economic point of view, this is a definite argument against a subsidy to be used to compensate existing owners for individual plots of land taken away from them. Such a subsidy encourages waiting instead of action on the part of existing owners of blighted properties. It encourages cash withdrawals, as we have already shown, instead of stimulating owners to act in concert for a group improvement such as is needed to realize the potentiality of each individual parcel.

Up to the present time the courts have held that awards in condemnation must be paid in cash; that payments in kind or payments in stock or other types of securities do not suffice. When one thinks back over the great number of proceedings in eminent domain that have been brought by railroads and public utility companies, it is easy to see why the courts have held that the stock or the bonds of such corporations are inadequate compensation. This does not necessarily mean that a proposition may not be made in due course which will stand the test of the courts. Many of the basic objections disappear in the case of a corporation formed for the

express purpose of co-operative effort to plan for the improvement of real estate and to prevent subdivided ownerships from becoming a menace.

IV. Substitution of Equivalent Use

It is necessary to inquire further into the details of the "equivalent facilities" that can be turned over to the owners of an interest in a blighted district which is being planned for redevelopment. Let us take our typical owner of four tenement houses on a plot 100′ x 100′ which we have recognized as a 1% interest in the district as a whole. If the buildings are obsolete, it may not be the wisest course to turn these or similar buildings back to the owner. It would be preferable to offer the owner an interest in modern buildings which will give him an equivalent or better return. It is obvious that the great number of small parcels now in obsolete use cannot be adapted to modern use without a rearrangement of these parcels into larger units. The question presented, therefore, is how can we induce the owner of our original tenement houses to accept a partial ownership in a larger enterprise? In the first place, is it equitable compensation to ask the owner to take stock? In the second place, will he be willing to do so?

In answer to the first question, it is clear that to offer stock in a replanned and rebuilt real estate enterprise in exchange for a parcel of real estate in a depreciated district is a very different proposition from offering stock in a railroad or a public utility company in exchange for part of a farm or a home taken or damaged in the interest of the railroad or utility company. It is true that the holder of the stock must give up a large share of his theoretical right to independent action and independent decision; but it must be remembered that the owner of a tenement property, while theoretically in possession of independence of decision and action, has from a practical point of view, already lost these. Blight has gradually consumed a large proportion of the potential values that may once have resided in his property because this same owner and the owners who surrounded him possessed no means for securing concert of action. I believe that, when properly presented, the courts will recognize a stock interest in a redevelopment project as the equitable equivalent of what he has given up and therefore as "just compensation."

Furthermore, the courts should recognize that the method employed, whether embodied in corporate or in cooperative form, will constitute a means for restoring the communal advantages of concerted interest and action which have been so long smothered by conditions leading to anarchy in real estate administration and to inevitable blight. At this point we must emphasize again that, while stock interest may constitute "just compensation" to the absentee landlord, it does not, considered alone, constitute "just compensation" or equivalent use for the shelter enjoyed by an occupant owner. In such cases equivalent shelter, equivalent advantages, and opportunities for equivalent use must be offered as well as stock ownership.

There are several points that must be considered before making an offer of equivalent shelter together with a money pay-off. It is basically essential to define the meaning of the property or property rights which are being taken for public purposes. We incline to the view taken by Professor Ely[11] when he points out that expropriation means the "substi-

[11] See Richard T. Ely, *Property and Contract* (New York: Macmillan, 1914).

tution of one form of property for another. Expropriation does not carry with it the idea of *abolition of property* or lessening of the property of the individual, but *forced change in the form of property of the individual.*" Let us assume for the sake of argument that when the equivalent property is offered it cannot under any conditions be absolutely equivalent in the strictest sense of the word. There must in the nature of things be some difference. This difference may be insignificant and of a character which might very well be waived by the individual in consideration of the advantages to be derived. There will, however, be cases where *the difference in equivalent advantages, when recognized as a deprivation to the owner, can be expressed in terms of money.*

It would be a forward step if we could recognize that failure to provide equivalent advantages, as a result of the change of property use, is the prime reason for putting a money value upon the damages. It is altogether just to express this failure in money. It is not always just to attempt to put a money value upon compensation due an owner based upon the assumption that *all* of his rights in the particular piece of property had to be taken away from him.

In the past when private property has been taken for public use, and particularly in cases where it has been necessary to take all the property away from the private owner, the only method of compensation which the courts have sanctioned has been the payment of money for the value of capital facilities taken from the individual. In contrast to this expensive and often inequitable method, many state highway departments have been receiving rights of way through negotiation and exchange of equivalent advantages. Where the owner consents, the highway department may exchange plots of ground or may make improvements to compensate the owner for rights which are given up.

It should be pointed out that eminent domain proceedings in many states have not recognized as property such losses as are sustained through inconvenience as a result of public action. For example, let us take the case of a gasoline station where the pumps are set back from the street. We will assume that a street-widening project takes twenty feet from the front of the property without destroying the location of the gasoline pumps. A rapid transit subway is being constructed beneath the surface so that the street is torn up for a matter of a year or more. The damages to the gasoline station would be determined simply and solely by the value of the twenty-foot strip taken away from the gas station. The owner, however, might suffer a much greater loss through inconvenience of access to the gas pumps. During the period of reconstruction a temporary wooden bridge though furnishing legal access, would prove a great deterrent through inconvenience and would keep the usual customers away from the gas station. It is my belief that the recognition of temporary damage during a period of inconvenience is as important in the assessing of property taken away and of damages sustained by private owners in the public interest as are the damages sustained by permanent displacement of the original owner from all or a portion of his premises.

Urban redevelopment procedure marks a step forward because all damages and advantages can be considered on the group basis and because these can be weighed and composed in the light of conditions existing prior to the redevelopment, conditions during the transitional period and future conditions. Under urban redevelopment procedure, the

case referred to above could be handled by offering either a temporary location for the gas station or making it possible for the station owner to occupy a new permanent location. Damages sustained by the owner might be expressed in merely the cost of removal of equipment to the temporary or permanent location. If, because of a necessary disparity in timing and disadvantages due to reconstruction, loss could not be completely avoided, the damages sustained might be fully compensated for by payment of a differential for loss of income during the period when the gas station might be completely closed and expenses of the construction of temporary access thus would be obviated.

On the other hand, in the case of displacement of an owner-occupant of residential shelter, temporary equivalent shelter might be given in unoccupied buildings within the area to be redeveloped, and permanent equivalent shelter given as soon as the rebuilding could be effected. The money damages might be reduced to the payment of the expenses of moving during the transition period.

It should be recognized that many cases of owner-occupancy will have other factors besides the mere giving of equivalent of residential quarters. For example, let us assume that an owner occupies as a residence a basically strategic corner. The owner may, as a matter of fact, submit to inconvenience in relation to residential standards for the reason that he believes that some time in the future he might have the resources to develop his property to realize its strategic advantages; or, failing to obtain the resources himself, he might transfer his property to another at a profit to himself for a development. In such a case the offer of shelter equivalent to that now enjoyed by the owner might be obviously insufficient. On the other hand, it is a matter of equity to determine what proportion of the advantage derived from new development belongs to the original owner who has failed to write off capital depreciation and what proportion belongs to those who make the improvement.

It should be pointed out, however, that by handling the whole matter of urban redevelopment on the basis of group rights, appraisal of the existing value of the premises would make it possible to recognize in the final distribution of rights the separation of existing residential advantages enjoyed by the owner from the same owner's *reasonable* deferred rights of development. This might be taken care of by the distribution of stock interest in the urban redevelopment accompanied by the proprietary right to residential quarters equivalent to those originally enjoyed by the owner.

Erratum

In the May 1944 issue of this *Journal* there appeared Part I of Mr. Holden's article on the "Technique of Urban Redevelopment," which discussed Individual vs. Group Interests in Real Property. The two illustrations appearing on page 140 of that issue were inadvertently transposed. Librarians especially are urged to indicate this correction in volumes purchased for binding.

Reports and Comments

The Challenge of Agrarpolitik

ANYONE who has read Viscount Astor and Seebohm Rowntree's *British Agriculture*[1] must have been impressed with its succinct statements of the principles of future British agricultural policy. Perhaps one reason for the clarity and rationality of this presentation lies in the fact that in a previous book, *The Agricultural Dilemma*,[2] they had probed directly the single question: Should Great Britain hope to increase or to prevent decline in the numbers of those engaged in farming? This first survey, they regretfully reported, led them to the "negative and pessimistic" conclusion that a decline in the proportion engaged in agriculture must continue. But pessimistic or not, these writers had at least laid their foundation in a bedrock question so that in their later work they were able to approach the problems of agricultural policy with unusual perspicuity.

A basic premise of *British Agriculture* is:

"It is inevitable that in the ordinary course of human progress, the proportion of the population engaged in agriculture will steadily decline . . . [for] as man's power over nature increases, he is able to obtain the bare necessities of life with a smaller expenditure of energy, and he is able accordingly to turn more of his attention to the satisfaction of less urgent and more complex wants . . . A decline in the proportion of population engaged in agriculture is thus an inevitable concomitant of economic progress and an improving standard of life; and it is impossible to lay down on *a priori* grounds, any limits to the extent to which this proportion may eventually decline."[3]

To some, this generalization may appear axiomatic; but if so, it is seldom explicitly stated and even less frequently employed as a basic starting point for approaching other problems of agricultural policy. Actually, however, but few other statements made about farming as a whole have any greater implications for the analysis of general agricultural problems.

The secular tendency of agriculture towards diminishing relative importance in the utilization of resources has a significant corollary for the position in which the rural social scientist finds himself. It means that rural social scientists have the arduous job of working out policies and programs designed to maintain the social health and financial prosperity of a branch of the economy which, at the same time, is experiencing a decline in its relative position.

Put in these clear-cut terms, it is obvious that rural social scientists have a distinctly difficult assignment. It is hard enough to work out solutions for social problems in sectors of the economy which are in the process of expansion. It is a far more difficult task to tackle social problems in a branch of the economy the dimensions of which are contracting regardless of the advances which may be made here and there within it. Social scientists certainly know that even on the margins and within narrow fields of human activity, adjustments away from customary activities and traditional locations are not made automatically nor without resistance. It is only with the most careful planning or under unusually fortuitous circumstances that such adjustments are made harmoniously if they are made at all.

In an exceptionally important, recent book,[4] Alexander Gerschenkron has examined in detail the way in which Germany ran head-on into this tremendous problem of agricultural readjustment, the dodges which were expediently followed because of inability or unwillingness to face up to basic issues, and the consequences which followed. Because of the pattern of behavior in Germany in respect to this question, Gerschen-

[1] Viscount Astor and B. Seebohm Rowntree, *British Agriculture* (London: Longman's, Green and Co., 1938); also, in a later revised and shortened edition, *British Agriculture* (Harmondsworth: Penguin Books, Ltd., undated).

[2] Viscount Astor and B. Seebohm Rowntree, *The Agricultural Dilemma* (London: P. S. King and Son, Ltd., 1935); see also a review of this book by O. B. Jesness, *Journal of Farm Economics*, May, 1936.

[3] *Op. cit.* (Penguin edition, p. 50); see also, pp. xi-xii and 51-52.

[4] *Bread and Democracy in Germany* (Berkeley: University of California Press, 1943).

kron's book is, in sum, the story of German agriculture's share in the guilt of Nazism. The story which Gerschenkron has unfolded with clarity and engaging interest should be "must" reading for all land and agricultural economists; and one can only hope that it may reach an even wider audience.

Going back to the time when the outward forms of feudalism were ended and when the industrial revolution spread in Germany, Gerschenkron points out that the former actually strengthened the power position of the Junkers and the latter directed the anti-urban feelings of the peasants against the trade unions. Even at this early juncture, agrarian resistance against agricultural readjustment deepened the rift between peasant and laborer. The agrarians fought for and won tariff protection while the trade unionists lost in their efforts to hold to a free trade policy. In short, the costs of not readjusting agriculture were placed on the shoulders of the urban workers.

In other European countries the issues were met differently. England allowed its rural population to decline to less than ten per cent of the total population.[5] Denmark and other Scandinavian countries drastically revamped their systems of farming and reorganized much of their rural economies on a cooperative basis. Switzerland gave moderate tariff protection to the types of farming to which it was best adapted but left other products on a free import basis.

In Germany, protectionist devices were established to hold the line against any broad agricultural readjustments. Since the Junkers ruled the roost and since they were engaged in producing bread-grains on the poorest lands, the protectionist program worked primarily to keep their high-cost cereal area in production. To accomplish this feat, the Junkers had to instill in the minds of the independent farmers who grew intensive products on relatively good land the false belief that the interests of all agriculturalists were served by their program. The Junkers were also able to establish an entente with the iron industry. With the Junkers giving the cue for agriculture and the iron magnates posing for industry, victory was assured for the anti-progressive protectionist policy of the "iron and rye" solidary bloc.

This victory, won in 1879, "meant a perpetuation of the feudal element in German society through preservation of the traditional economic basis of the Junkers." Gerschenkron appraises this move in the following terms: "There are few historical events to which an equally disastrous effect on the destinies of German democracy can be ascribed."[6] (p. 47)

Following 1879, the bulwarks against agricultural change were made even stronger. The immediate cost was loaded onto the German consumers in the cities; but eventually everyone lost for one cannot "ignore the large part which the system of German grain protection played in involving the country in the first World War." (p. 88) Thus does Gerschenkron end the first part of his book.

After the first World War, most European countries at least inaugurated broad-gauged programs of land reform.[7] But in Germany, because of the food shortages caused by continuance of the Allied blockade and because of the political position of the Junkers, no radical land program was instituted. "Translated into the realistic language of practical politics, this meant that the Junkers had been rescued again." (p. 104)

With the extended food shortage after the war, the government had to subsidize the price of grain to urban consumers. This subsidy program gave impetus to a struggle to control governmental policies and this "soon took the form of a conflict between low-income urban consumers and agricultural producers, [and] re-created the old bonds between the peasants and the Junkers, making the latter appear as the spokesmen for the agricultural population as a whole." (p. 107) The pre-war pattern was fully repeated by 1925 when the Junkers once more created a solidarity bloc not only to perpetuate "the inefficient grain production but also (to abstain) from necessary adjustments in industry." (p. 116)

[5] Astor and Rowntree recognize that the British "policy of free trade required of our farmers a greater adaptability of technique than was the case elsewhere . . . It is true to say that, over the long period, the traditional British policy of putting the consumer first has benefited the agricultural worker . . . Protectionist countries . . . have definitely retarded any improvement in the welfare of their peasant populations." *British Agriculture* (Penquin edition, p. 64).

[6] The role of one famous German economist in this critical turn of German *agrarpolitik* is well described in Evalyn A. Clark's "Adolf Wagner: From National Economist to National Socialist," *Political Science Quarterly*, September, 1940.

[7] Cf., L. A. Salter, Jr., "Global War and Peace, and Land Economics," *Journal of Land & Public Utility Economics*, November, 1943.

As the world-wide agricultural depression of the 1930's approached, all manner of devices were designed to hold the line for the grain producers. The government bought up rye until it had no way to get rid of it; it held the price of wheat so high above the world price as to all but eliminate Germany from world wheat trade. The Junkers had their problems, but the peasants were "driven into a frenzy" which "suited to a nicety" the aims of Hitler's party. Meanwhile, the "Junkers were giving Hitler the valuable support of their influence, while industry provided enormous financial aid." This new form of the solidarity bloc "augured ill for the future of free government in Germany." (p. 147)

Gerschenkron does not make the mistake of overstating his thesis so as to project a single-cause analysis of the fascist complex but he does emphasize that the Junkers with their status quo agrarian policies played a "momentous role" in the "long process of disintegration of democracy . . . and in the initiation of a system which . . . destroyed the peace of a world and came close to destroying also its freedom." (p. 153) Since the accession of Hitler to power, the position of the Junkers within Germany has been strengthened while that of both the peasants and the urban workers has, of course, declined.

In Part III of his book, Gerschenkron turns to the problems of peace. A summary of this section is least likely to do justice to Gerschenkron's thought for he is careful to indicate the difficulties and dangers in various proposed policies and programs. He minces no words, however, in stressing the idea that "nothing short of a revolutionary upheaval" will dislodge the Junkers and that "the preservation of the Junkers and the establishment of lasting democracy in Germany and of peace in the world are inherently incompatible." (pp. 176 and 183) He also gives fair warning that the Junkers will try to save their power position and indicates how some, like Rauschning, are already laying the groundwork for the rescue.

In his final chapters, Gerschenkron outlines a set of recommendations for the readjustment of German agriculture. He sees the possibility of a program that will not call upon the town consumer "to defray the cost of preserving an expensive museum of traditional ways of life"[8] (p. 195); and he recognizes the need of an industrial policy which will help "the nonagricultural branches of the economy to absorb steadily the excess population of the open country." (p. 222) There is, therefore, a genuine need for understanding that agrarian interest actually complements, rather than conflicts with, the establishment of "economic security" and social improvement for industrial labor.[9] (p. 223)

Professor Gerschenkron is careful to restrict his story and his recommendations to Germany. At only one or two points in his book does he make references to parallel and contrasting comments or experiences in other European countries.[10] He exercises proper caution in thus limiting his conclusions, for the transference of social generalizations from one country to another, particularly when there are wide cultural and historical differences between the countries, is, of course, fraught with difficulties if scientific requirements for warranted assertions are respected.

Still, one cannot help wondering if rural social scientists may not learn more from foreign experiences than they have so far attempted. It requires no great effort to prove that Germany is not England, nor Denmark, nor France, nor, more certainly, the United States. We can all admit that the ways in which even the same basic forces will work themselves out in one country cannot be expected to parallel in detail the paths which will be found elsewhere. Yet it seems hardly possible to read a deeply probing book like *Bread and Democracy in Germany* (or like *British Agriculture*) without stopping to ask whether we are con-

[8] It is interesting to compare these conclusions for Germany with those of Professor Dennison for England who says, "There is no evidence that the country, or, indeed, enlightened agricultural opinion, wishes to see agriculture and its rural communities treated as museum pieces, given the 'best possible conditions,' but sheltered from change." *Report of the Committee on Land Utilization in Rural Areas* (London Ministry of Works and Planning, 1942), pp. 121-122.

[9] Cf., L. A. Salter, Jr., "Farm Property and Agricultural Policy," *Journal of Political Economy*, February, 1943.

[10] Since we have made several references here to Great Britain, it should be pointed out that Gerschenkron feels that the English agricultural transformation "was and still is one of the basic pillars upon which British democracy rests." British agricultural programs "while sheltering agriculture, did not weigh too heavily on the consumer's budget. This is one of the reasons for the failure of fascist movements like that of Sir Oswald Mosley to strike roots in British soil." (p. 194)

ducting ourselves in such a way as to avoid some of these "agricultural dilemmas" which have plagued older farming areas; or whether, if such dilemmas are before us, we are ready to meet them fairly and squarely.

Gerschenkron's book should confirm in the minds of its readers the great potential dangers of not raising at least one question. The question is too broad and too important to be answered offhand but is one that should never be out of democratic minds. The question is: How much of any agricultural policy reflects rural social science and represents agricultural statesmanship and how much of it is *agrarpolitik*?

Looking back over the history of American agriculture, it is clear that one of the greatest readjustments in American agriculture was experienced in the withdrawal of agriculture from the northeastern highland areas. This historic adjustment was made without benefit of much local ameliorative planning. It was, however, fortunately associated in time with the growth of industry and with the opening of new areas in the middle west. Even so, we know that the process was not a painless one, just as we know that some of the remnant problems of that reorganization are still with us. Nevertheless, there is but little disagreement that the change was in the best interest of the region and the nation as a whole.

During the past few years, in areas where great regional readjustments have been called for, some excellent programs of basic adjustment were courageously conceived and thoughtfully applied. In other sectors, we have had to proceed with greater caution, more expediency, and perhaps with less justification in terms of long-time national gains.

In the coming years, we shall have the yet unsolved problems of the past together with new demands of the future. In approaching this critical period, we may well consider the vast difference in end results if we exert our utmost efforts as rural social scientists to work out ameliorative programs which are in the long time interest of the country, as compared with the consequences of giving way to the persistent allure of seeking only protection from the ever-advancing requirements of social progress. In this difference lies the challenge, or the threat, of *agrarpolitik*.

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Property Tax as a Burden on Shelter

IT IS generally agreed that, during the war and in the interests of preventing inflation, state governments should make every effort to maintain the level of state revenues, even if state expenditures decline. Questions of major reform in state revenue systems, such as the substitution of a sales tax for all or part of the property tax, are likely to be laid over for the duration. In the immediate postwar period, however, the revision of federal and state revenues again will be of major importance in order that our tax system may offer the greatest stimulus to a high level of income and employment. At that time both tax equity and sound fiscal policy will point in the same direction—toward a revenue system that does not restrict expenditures on consumer goods. One of the most important questions which will arise is that of the relative burdens on consumption of the property tax on shelter in contrast to a sales tax. This article is intended to throw some light on this question.

Probably we shall become quite housing-conscious after the war and very likely housing will provide a major outlet for private investment as well as for government or government-encouraged investment. Steps undoubtedly will be taken to stimulate investment in housing, and the effect of the general property tax on this type of investment will come in for critical examination. Beyond question, our system of local taxation—particularly the general property tax—lays a heavy hand on housing. The intention here is not to examine the difficult question of the relation between the general property tax and incentives to investment in housing. This question, however vital it is, should not be permitted to outweigh considerations relating to the importance of maintaining a high level of consumption—

the avoidance of regressivity in our tax system.

Residential property makes up a large part of the real property tax base—in Wisconsin about 45 per cent of the assessed value. In most states, with the exception of a few years during the depression of the 1930's, the tax rate on residential property has been on the upgrade since the first World War. Residential property taxation directly affects more individuals than any other form of property taxation; and the political repercussions of this tax have been apparent in the last decade. Residential property taxpayers are the group from which much of the agitation for tax limitations and homestead exemptions has come.

To assess fairly the claims of those who assert that property taxes on shelter are too high, that they burden unduly those in the low income groups, and that some measure of property tax relief is desirable, it is necessary to examine in detail the burden of the property tax as it now operates on residential property, and the relation of this tax burden to the incomes of those who occupy the property. Unfortunately, the incidence of the property tax is not a matter of general agreement; the conclusions reached vary quite substantially with the incidence theory which is applied. No special claim to validity is attached to the assumptions used here.

Property Tax Burdens

The first task in the analysis of the burden of residential property taxation is the selection of an appropriate sample of families living in owned and rented homes for which data are available on both income and expenditure. From among several such studies a survey of consumer purchases, conducted under the supervision of the Bureau of Labor Statistics in the middle 1930's, was selected.

From this study six samples were chosen: (1) Chicago, Illinois; (2) Providence, Rhode Island; (3) Columbus, Ohio; (4) Omaha, Nebraska, and Council Bluffs, Iowa; (5) three middle-sized cities in the East Central area—Muncie, Indiana; New Castle, Pennsylvania; and Springfield, Illinois; and (6) five small cities in the East Central area—Beaver Falls and Connellsville, Pennsylvania; Logansport and Peru, Indiana; and Matoon, Illinois.[1]

Table I shows the burden of property taxes on residences by income classes for the six samples chosen for consideration. To compute these burdens property taxes were taken as those paid on the residences inhabited by the families in each income class. This assumes that all such taxes were a burden on those occupying the residence. Under this assumption, the owner-occupier and the renter-occupier bear the full burden of the tax; that is, in the latter case the landlord shifts the full tax burden forward to the tenant in the form of rent. An alternative assumption regarding the nature of the shifting process will be examined below. Income in every case is family income, which is the only reasonable unit to employ, for use of the income of the principal income recipient only would tend to understate the income available for family expenditure. Family income, as used here, includes the imputed income from owned homes. This item is a proper inclusion since it represents an amount which would have to be met from other sources of income were the home not owned.[2]

Table I shows that, almost without exception, the burden of the property tax on homes is a larger percentage of income when

[1] The number of eligible families from which the sample is drawn is as follows: Chicago, 215,870; Providence, 10,978; Columbus, 32,708; Omaha-Council Bluffs, 23,401; 3 middle-sized cities, 17,016; and 5 small cities, 7,395. (U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities, 1935-36*, Bul. 648, Vol. I, Washington, 1931, pp. 86, 88, 90, 94, 98, 106.)

This means that although the families included in the sample are "normal"—in the sense that they represent no economic stress, no broken family ties, and no alien customs—the average income of the families selected is higher than that of all families in these communities. It is very difficult to judge what influence this factor would exert on such variables as home ownership, value of and amount of taxes on homes, and rental payments. (U. S. Bureau of Labor Statistics, *Family Expenditure in Nine Cities of the East Central Region, 1935-36*, Bul. 644, Vol. II, Washington, 1941, pp. 1-2.)

[2] Cf., Walter A. Morton, "General Property Taxes Found Very Regressive," *The Municipality*, Wisconsin League of Municipalities, February, 1940, pp. 25 ff. Professor Morton used as a family income the income of all members of the family who filed state income tax returns. Thus, the earnings of any individuals (unmarried, over 18 years of age) who received less than $800 were excluded. Income of members of the family under 18 would be included except for the fact that this income is generally under-reported. The imputed income on owned homes was also excluded. Those in the low income groups who file income tax returns are not representative of all income recipients in the low income groups. Professor Morton did not extend his analysis to tenants. The findings showed tax burdens in terms of income to be very heavy and sharply regressive.

they are owned than when they are rented.[3] This relationship appears to be a general one; that is, the proportion by which the property tax on owned homes exceeds that on rented homes is roughly the same for all income classes.[4] The higher property taxes paid by owners indicate that those who own their homes will spend a larger proportion of their incomes on housing facilities and presumably enjoy a higher standard of housing than those who rent their homes.

One reason why the percentage relationship between property taxes and income is so large in the lower brackets is that, on the average, families below the $1,250 level spend more than their incomes. This means that for this low income group any item of expenditure expressed as a percentage of income will necessarily be large. Also, the low income brackets contain a considerable number of individuals who might be characterized as "fallen stars." These individuals formerly received a higher income, at which time they made commitments in housing; their incomes have fallen but their housing

[3] The data relating to taxes paid on owned homes were taken directly from the tables (see footnotes, Table I). Taxes paid on rented homes could not be obtained directly so the following procedure was adopted: For each sample, the ratio of taxes to gross imputed rental value for owned homes was calculated. This ratio was then applied to the average rent paid by families in each income class. The ratio of taxes to gross imputed rental value varied from .1210 for Columbus to .1975 for 5 small cities in the East Central area, which indicates that property tax burdens vary considerably among different cities. An examination of data revealed that the most common relationship between taxes and rental value was a fairly constant ratio among all income classes; that is, taxes constitute a fairly constant proportion of rent regardless of the level of rent. As indicated, however, a different ratio must be employed for each city. In a few cases where the ratio of taxes to rent is higher in the larger rent brackets, the use of a constant ratio for each city introduces a slight tendency toward accentuating regressivity. Data from U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities*, 1935-36, Bul. 648, Vol. I, Table 6, p. 20; Table 6, p. 199; Table 6, p. 202. Data from Milwaukee relating to rents and values were examined in detail. Assistance in the preparation of these data was furnished by the personnel of Work Projects Administration Official Project No. 665-53-3-253.

[4] The data from Chicago are a marked exception to this. In a substantial number of income classes for that city, the burden of taxes is greater for renters than for owners.

TABLE I. BURDEN OF PROPERTY TAXES ON RESIDENCES BY INCOME CLASSES, 1935-36*

(Showing taxes as a percentage of income on owned and rented homes—on the assumption that all taxes fall on the occupant)

Income Class (occupant)	Chicago[1]		Providence		Columbus[1]		Omaha-Council Bluffs		East Central, 3 middle-sized cities		East Central, 5 small cities	
	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented	Owned	Rented
$ 250– 499	.....	.....	.....	.....	.....	.....	.....	.....	12.05	6.01	11.83	5.11
500– 749	11.23	5.89	.....	4.94	5.75	3.30	3.85	4.44	6.65	4.25	5.91	3.95
750– 999	4.92	4.99	5.19	4.42	4.79	2.77	5.16	3.78	5.85	3.66	5.06	3.28
1,000–1,249	6.85	4.21	4.84	4.05	3.44	2.42	4.26	3.52	5.15	3.51	4.69	3.04
1,250–1,499	4.92	4.22	5.66	3.52	3.14	2.17	3.59	3.06	4.57	3.06	3.60	2.66
1,500–1,749	4.57	4.00	4.61	3.49	2.81	2.25	3.45	3.04	4.20	2.97	3.42	2.75
1,750–1,999	4.23	3.88	4.83	3.14	2.55	1.90	3.56	2.80	3.49	2.97	3.60	2.59
2,000–2,249	3.84	3.69	4.90	3.23	2.64	1.85	3.21	2.65	3.45	2.93	3.05	2.29
2,250–2,499	3.77	3.51	4.35	3.02	2.27	1.85	3.04	2.91	2.94	2.94	2.66	2.26
2,500–2,999	3.82	3.46	3.73	3.10	2.09	1.61	3.01	2.50	3.41	2.90	2.70	2.33
3,000–3,499	2.69	3.12	4.23	3.00	2.12	1.56	2.92	2.71	3.31	2.56	2.39[2]	1.75[2]
3,500–3,999	3.02	3.13	3.28	2.80	2.22	1.45	2.59	2.19	3.08	2.69	.....	.....
4,000–4,999	2.45	2.82	4.81	2.79	1.98	1.50	2.63	2.55	2.78	2.23	.....	.....
5,000–7,499	2.79	2.52	3.48	2.17	1.66	1.23	2.63	1.64	2.68[3]	1.83[3]	.....	.....
7,500–9,999	2.29	2.53[4]	3.52[4]	1.88[4]	4.01[4]	.71[4]	1.72[4]	1.10[4]	.....	.....	.....	.....
10,000–over	2.12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* *Source:* U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities, 1935-36.* Bul. 648, Washington, 1941: (Chicago) pp. 110, 184, 194; (Providence) pp. 112, 184, 194; (Columbus) pp. 114, 185, 195; (Omaha-Council Bluffs) pp. 118, 187, 197; (East Central, middle-sized cities) pp. 122, 189, 199; (5 small cities) pp. 130, 192, 202.

[1] White families. [2] Income class, $3,000 and over. [3] Income class, $5,000 and over. [4] Income class, $7,000 and over.

commitments have remained the same. Such individuals may be said to spend a "disproportionate" part of their income on housing. It could be argued that such individuals would be "better off" renting rather than owning their homes.

The index of regressivity in Tables II and III is a striking illustration of the extent to which the property tax on homes bears more heavily on the lower than on the higher income groups. The degree of regressivity is measured by the drop in the index; if, for example, the index falls 21 points between the $1,000-$1,249 class and the $1,250-$1,499 class, whereas between the two next-higher classes it falls only 3 points, a tendency toward regressivity is established. The index expresses the relationship between the property tax as a percentage of income for each class and the average of the percentages for all classes.[5] Perhaps the most important conclusion indicated by the tables is that they reveal no constant pattern of regressivity. For the Omaha-Council Bluffs sample, regressivity—measured as indicated—is greater for owners than for renters in 8 of the 13 income classes. For the middle-sized cities, regressivity is greater for owners than for renters in exactly 50 per cent of the income classes.

The general trend of the index is also significant. The greater the acceleration of the fall in the index, the greater is the regressivity. In both the middle-sized cities and in Omaha-Council Bluffs there is a marked tendency for regressivity to be greatest below the $2,000 income level. From $2,000 to $3,000 there is little regressivity but above that point the burden is again regressive. Thus, the middle brackets show a fairly constant burden of property taxes in terms of income, whereas the proportional changes in burden are greater, class by class, as one moves toward the lower income groups. Proportional changes are also great as one moves from the upper toward the middle income groups. The regressivity of the sales tax in relation to the property tax will be considered below.

Thus far, all computations of property tax burdens on residential property have been

[5] Regressivity is measured by the drop in the index between income classes. It cannot be measured by comparing owners and renters in the same income class.

TABLE II. BURDEN OF PROPERTY TAX ON RESIDENCES: REGRESSIVITY OF PROPERTY TAX AND SALES TAX, 1935-36, OMAHA-COUNCIL BLUFFS*
(Assumption: all taxes fall on the occupant)

Income Class (occupant)	Average Family Income[1]	Owned Homes		Rented Homes		Index of Regressivity[2] (average per cent of income = 100)		
		Taxes paid	Per cent of income	Taxes paid[2]	Per cent of income	Tax on owned homes	Tax on rented homes	Sales tax
$ 500– 749	$ 699	$26.90	3.85	$31.01	4.44	118	160	129
750– 999	907	46.80	5.16	34.24	3.78	158	136	122
1,000–1,249	1,152	49.10	4.26	40.60	3.52	131	127	121
1,250–1,499	1,391	50.00	3.59	42.55	3.06	110	110	114
1,500–1,749	1,636	56,50	3.45	49.73	3.04	106	109	107
1,750–1,999	1,861	66.20	3.56	52.11	2.80	109	101	106
2,000–2,249	2,118	67.90	3.21	56.20	2.65	98	95	102
2,250–2,499	2,368	72.00	3.04	68.94	2.91	93	105	94
2,500–2,999	2,733	82.20	3.01	68.43	2.50	92	90	93
3,000–3,499	3,224	94.30	2.92	87.26	2.71	90	97	90
3,500–3,999	3,751	97.00	2.59	82.30	2.19	79	79	82
4,000–4,999	4,504	118.60	2.63	114.72	2.55	81	92	79
5,000–7,499	5,659	148.70	2.63	92.83	1.64	81	59	86
7,500–over	10,793	185.20	1.72	119.22	1.10	53	40	74

* *Source:* U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities, 1935-36.* Bul. 648, Washington, 1941, pp. 118, 187, 197.

[1] Includes non-money income from owned-homes. [2] As defined in accompanying text.

made on the assumption that the occupant of the dwelling carries the entire burden of the property tax. Prevailing theories regarding the shifting and incidence of property taxes, however, have long held that the tax on the land is a fixed charge which the prospective purchaser takes into account in deciding the price which he will pay for the land—that is, the amount which he will pay for the property is based on the capitalized income after the payment of property taxes. This will be true, it is argued, for land—a non-reproducible good—but not for improvements whose value tends to follow the cost of reproduction. Table IV shows the burden of property taxes as a percentage of family income for home owners and renters, under the assumption that the tax on improvements is borne by the occupant of the residence, whereas the tax on the land is capitalized and therefore burdenless. The result would be unchanged in the case of rented property if the landlord were to bear this portion of the tax[6] because as the ratio of improvements to the total value of the property is assumed to be constant, the index of regressivity is unchanged. The reduction in property tax burdens is 30.1 per cent throughout.[7]

The Property Tax and the Sales Tax

Those who favor lower property taxes, or some form of property tax relief through limitation laws or homestead exemptions, frequently accompany their proposals with the advocacy of a sales tax to replace lost revenue. Even when a sales tax does not comprise part of the program of property tax

[6] See Luigi Einaudi, "Capitalization and Amortization of Taxes," *Encyclopedia of the Social Sciences*, Vol. III, New York, 1937, pp. 211-212.

[7] The figure 30.1 per cent is the ratio of land to improvements in Wisconsin cities and villages. It was assumed to be constant in the absence of a breakdown by rental classes or value classes. It appears that, in view of the high level of land values in crowded urban areas where low income groups live, the ratio is probably not lower in the smaller than in the larger income brackets. Perhaps a more realistic assumption regarding the shifting of property taxes on residences would be that part of the tax on the land and part of the tax on the improvements are shifted forward to the tenant. But since it is manifestly impossible to draw a line between the part shifted and the part not shifted, only the "extreme" cases are examined here: (a) complete burden on the occupant of all property taxes, whether the residence is owned or rented, (b) complete burden on the occupant of the tax on the improvements.

TABLE III. BURDEN OF PROPERTY TAX ON RESIDENCES: REGRESSIVITY OF PROPERTY TAX AND SALES TAX, 1935-36, THREE MIDDLE-SIZED EAST CENTRAL CITIES*
(Assumption: all taxes fall on the occupant)

INCOME CLASS	AVERAGE FAMILY INCOME[1]	Owned Homes		Rented Homes		Index of Regressivity[2] (average per cent of income = 100)		
		Taxes paid	Per cent of income	Taxes paid[2]	Per cent of income	Tax on owned homes	Tax on rented homes	Sales tax
$ 250– 499	$ 435	$52.40	12.05	$26.16	6.01	265	189	160
500– 749	669	44.50	6.65	28.41	4.25	146	134	126
750– 999	895	52.40	5.85	32.73	3.66	129	115	122
1,000–1,249	1,134	58.40	5.15	39.78	3.51	113	110	112
1,250–1,499	1,364	62.40	4.57	41.70	3.06	101	96	109
1,500–1,749	1,608	67.60	4.20	47.68	2.97	93	93	104
1,750–1,999	1,870	65.20	3.49	55.49	2.97	77	93	97
2,000–2,249	2,120	73.20	3.45	62.15	2.93	76	92	97
2,250–2,499	2,372	69.80	2.94	69.74	2.94	65	92	92
2,500–2,999	2,739	93.30	3.41	79.51	2.90	75	91	86
3,000–3,499	3,218	106.60	3.31	82.26	2.56	73	81	82
3,500–3,999	3,701	114.00	3.08	99.47	2.69	68	85	80
4,000–4,999	4,414	122.80	2.78	98.42	2.23	61	70	73
5,000–over	6,732	180.10	2.68	123.46	1.83	59	58	57

* *Source:* U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities, 1935-36.* Bul. 648, Washington, 1941, pp. 130, 192, 199.

[1] Includes non-money income from owned homes. [2] As defined in accompanying text.

reduction, legislatures have frequently found it necessary to resort to taxes on consumption as the only alternative revenue source. It is, therefore, desirable to examine the burden and the regressivity of a sales tax as compared with the burden and regressivity of a property tax on residential property.

Tables II and III show the index of regressivity of the sales tax as compared with the regressivity of the property tax on owned and rented homes.[8] For the Omaha-Council Bluffs sample the sales tax is less regressive than the property tax on either owned or rented homes in the income classes below $1,250.[9] Above this class the regressivity pattern varies. Out of 12 income classes above $1,250 the sales tax is more regressive than the property tax for 5 classes having owned homes and for 4 classes having rented homes. The index of regressivity for the sales tax falls much less rapidly throughout its entire range than does that of the property tax on either owned or rented homes—indicating that, in general, it is less regressive than the property tax. The sample for middle-sized cities bears out the same conclusion as to the regressivity in the lowest income classes; the sales tax is, in general, less regressive than the property tax on both owned and rented homes below the $1,000 income level. Above that point, however, the difference between the regressivity of the property tax on owned and on rented homes is marked as compared with the regressivity of the sales tax. Between only 3 of the 11 income classes above $1,000 is the sales tax

[8] The base for the sales tax was computed from data for the respective samples from U. S. Bureau of Labor Statistics, *Family Expenditure in Six Urban Communities of the West Central Rocky Mountain Region, 1935-36*, Bul. 646, Vol. II, Washington, 1940, pp. 109-143; U. S. Bureau of Labor Statistics, *Family Expenditure in Nine Cities of the East Central Region, 1935-1936*, Bul. 644, Vol. II, pp. 207-253. The sales tax base computed here included all goods sold at retail, including fuel and electricity, but excluded all other services and rent.

[9] With the exception of home owners in the $500-749 class.

TABLE IV. BURDEN OF PROPERTY TAX ON RESIDENCES BY INCOME CLASS OF OCCUPANTS, 1935-36' OMAHA-COUNCIL BLUFFS, AND EAST CENTRAL MIDDLE-SIZED CITIES*

(Assumption: (1) all taxes fall on occupant, (2) only tax on improvements falls on occupant)

INCOME CLASS	Omaha-Council Bluffs				East Central Middle-sized Cities			
	Owned Homes		Rented Homes		Owned Homes		Rented Homes	
	All taxes paid by occupant	Tax on improvements paid by occupant[1]	All taxes paid by occupant	Tax on improvements paid by occupant[1]	All taxes paid by occupant	Tax on improvements paid by occupant[1]	All taxes paid by occupant	Tax on improvements paid by occupant[1]
$ 250– 499	.....	.....	.....	.....	12.05	8.42	6.01	4.20
500– 749	3.85	2.69	4.44	3.10	6.65	4.65	4.25	2.97
750– 999	5.16	3.61	3.78	2.64	5.85	4.09	3.66	2.56
1,000–1,249	4.26	2.98	3.52	2.46	5.15	3.60	3.51	2.45
1,250–1,499	3.59	2.51	3.06	2.14	4.57	3.19	3.06	2.14
1,500–1,749	3.45	2.41	3.04	2.12	4.20	2.94	2.97	2.08
1,750–1,999	3.56	2.49	2.80	1.96	3.49	2.44	2.97	2.08
2,000–2,249	3.21	2.24	2.65	1.85	3.45	2.41	2.93	2.05
2,250–2,499	3.04	2.12	2.91	2.03	2.94	2.06	2.94	2.06
2,500–2,999	3.01	2.10	2.50	1.75	3.41	2.38	2.90	2.03
3,000–3,499	2.92	2.04	2.71	1.89	3.31	2.31	2.56	1.79
3,500–3,999	2.59	1.81	2.19	1.53	3.08	2.15	2.69	1.88
4,000–4,999	2.63	1.84	2.55	1.78	2.78	1.94	2.23	1.56
5,000–7,499	2.63	1.84	1.64	1.15	2.68[2]	1.87[2]	1.83[2]	1.28[2]
7,500 and over	1.72	1.20	1.10	.77	.....	.....	.....	.....

* *Source:* U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities, 1935-36.* Bul. 648, Washington, 1941, pp. 118, 130, 187, 192, 197, 199.

[1] Relation between *land* and *improvements* taken from Wisconsin Tax Commission Property Tax Bul. 86, 1938, p. 15. Ratio of improvements to total full value (residential property Wisconsin villages and cities) is .6990.

[2] Income class, $5,000 and over.

more regressive than the property tax on owned homes, but the sales tax is more regressive than the property tax on rented homes in 7 of the 10 classes. The general conclusion is that, within the limits of these data, the sales tax appears to be less regressive than the property tax on residences in the low income groups whereas no marked differences appear between the regressivity of the sales tax as compared with the property tax on owned and rented homes above the lowest income groups.

A Sales Tax to Replace the Property Tax

If a sales tax is employed to raise sufficient revenue to replace completely the property tax on residences, what will be the resulting burden at various levels of income? Tables V and VI are a hypothetical and comparative illustration of the burden of such a tax. This comparison is made on two assumptions: that the sales tax is completely shifted forward to the consumer and that the burden of the property tax on residences falls entirely on their occupants.[10]

Under these assumptions, the Omaha-Council Bluffs sample indicates that the sales tax would be less burdensome than the property tax on residences in the income classes below $1,000 for both owned and rented homes. Above the $1,000 class the replacement sales tax shows a general tendency to be more burdensome than the property tax for renters but less burdensome than the property tax for home owners. For the sample of middle-sized cities (Table IV), the sales tax is a smaller burden than the property tax for both owned and rented homes in only the lowest class—below $500. In the other 13 income classes, with only two exceptions, the replacement sales tax is more burdensome than the property tax for renters and less burdensome than the property tax for home owners. Since renters predominate over home owners in the low income classes, more individuals would be burdened by a replacement sales tax than would be benefited.

In Table VII an alternative assumption in regard to incidence is examined—namely, that the sales tax is completely shifted forward to the consumer but that the property

[10] These estimates were prepared as follows: a sales tax base, including purchases at retail but excluding services and rent, was computed from the data on consumer expenditures (see footnote 8). The total amount of residential property tax payments for the sample was then apportioned according to the income distribution of the sales tax base.

TABLE V. BURDEN OF SALES TAX TO REPLACE PROPERTY TAX ON RESIDENCES BY INCOME CLASS OF OCCUPANTS, 1935-36, OMAHA-COUNCIL BLUFFS*

(Assumption: property tax falls on occupant and sales tax is shifted to the purchaser)

INCOME CLASS	Property tax burden		Sales tax replacement burden	Per cent of income taken by tax		
	Owned homes	Rented homes		Owned homes	Rented homes	Sales tax replacement
$ 500– 749	$26.90	$31.01	$26.80	3.85	4.44	3.83
750– 999	46.80	34.24	33.08	5.16	3.78	3.65
1,000–1,249	49.10	40.60	41.37	4.26	3.52	3.59
1,250–1,499	50.00	42.55	47.09	3.59	3.06	3.39
1,500–1,749	56.50	49.73	52.49	3.45	3.04	3.21
1,750–1,999	66.20	52.11	58.49	3.56	2.80	3.14
2,000–2,249	67.90	56.20	64.44	3.21	2.65	3.04
2,250–2,499	72.00	68.94	66.78	3.04	2.91	2.82
2,500–2,999	82.20	68.43	76.34	3.01	2.50	2.79
3,000–3,499	94.30	87.26	86.29	2.92	2.71	2.68
3,500–3,999	97.00	82.30	92.02	2.59	2.19	2.45
4,000–4,999	118.60	114.72	106.36	2.63	2.55	2.36
5,000–7,499	148.70	92.83	145.17	2.63	1.64	2.57
7,500 and over	185.20	119.22	236.63	1.72	1.10	2.19

* *Source:* U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities, 1935-36.* Bul. 648, Washington, 1941, pp. 118, 187, 197.

taxes on land are capitalized and hence burdenless.[11] On this assumption the sales tax, in almost every income class, is a heavier burden than the property tax on both owned and rented homes.

Conclusion

It may be concluded, on the basis of this evidence, that the case for substituting a sales tax for the property tax on residences as a means of reducing the tax burdens of home owners and renters is exceedingly doubtful, to say the least. Such a move would tend to favor home owners at the expense of renters and when it is remembered that renting—and not home ownership— predominates in the low income classes, it is clear that the number of individuals harmed would exceed the number benefited in those groups where tax burdens are heaviest in terms of income. Complete replacement is, of course, an unlikely possibility in view of the constant pressure on state legislatures to provide additional funds for state services. The above conclusion, however, is equally applicable to any movement toward partial replacement through property tax limitation laws or homestead exemptions.[12]

There is one additional—and weighty—argument against wholesale property tax reductions of any kind. To the extent that tax burdens on land have been previously capitalized and have operated to reduce the purchase price of property in the hands of the present owners, it follows that any reduction in property taxes will increase the value of that property by the capitalized value of the tax reduction. Unjust enrichment of this kind will often accrue to those who are neither needy nor especially deserving. Not only home owners but landlords as well may be in a position to acquire unearned increment of this sort. In the case of landlords, rents may decline but little and over a long period of time. To the extent that rents are not immediately reduced by the amount of the property tax reduction, landlords and not generally the most needy group in the community. Likewise, if general property tax relief is financed by means of a sales tax, benefits will be disseminated to commercial, industrial, and agricultural property and to this extent reduce the amount of benefits available for residential property.

[11] As pointed out above, this assumption reduces the burden of property taxes on residences by about 30 per cent.

[12] It should be further remembered that a homestead exemption, with a sales tax to replace the lost revenue, carries the additional objection that no property tax relief (through lower rents) is made available to tenants, who are

TABLE VI. BURDEN OF A SALES TAX TO REPLACE PROPERTY TAX ON RESIDENCES BY INCOME CLASS OF OCCUPANTS, 1935-36, IN THREE MIDDLE-SIZED EAST CENTRAL CITIES*

(Assumption: property tax falls on the occupant and sales tax is shifted to purchaser)

INCOME CLASS	Property Tax Burden		Sales Tax Replacement Burden	Per cent of Income Taken by Tax		
	Owned homes	Rented homes		Owned homes	Rented homes	Sales tax replacement
$ 250– 499	$52.40	$26.16	$24.10	12.05	6.01	5.54
500– 749	44.50	28.41	29.40	6.65	4.25	4.39
750– 999	52.40	32.73	37.94	5.85	3.66	4.24
1,000–1,249	58.40	39.78	44.10	5.15	3.51	3.89
1,250–1,499	62.40	41.70	51.67	4.57	3.06	3.79
1,500–1,749	67.60	47.68	57.65	4.20	2.97	3.59
1,750–1,999	65.20	55.49	63.20	3.49	2.97	3.38
2,000–2,249	73.20	62.15	71.98	3.45	2.93	3.40
2,250–2,499	69.80	69.74	76.25	2.94	2.94	3.21
2,500–2,999	93.30	79.51	82.11	3.41	2.90	3.00
3,000–3,499	106.60	82.26	91.13	3.31	2.56	2.83
3,500–3,999	114.00	99.47	102.18	3.08	2.69	2.76
4,000–4,999	122.80	98.42	111.87	2.78	2.23	2.53
5,000 and over	180.10	123.46	134.26	2.68	1.83	1.99

* *Source:* U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities*, 1935-36. Bul. 648, Washington, 1941, pp. 130, 192, 199.

TABLE VII. BURDEN OF SALES TAX TO REPLACE PROPERTY TAX ON RESIDENCES BY INCOME CLASS OF OCCUPANTS, 1935-36, IN OMAHA-COUNCIL BLUFFS AND THREE MIDDLE-SIZED EAST CENTRAL CITIES*

(Assumption: only tax on improvement falls on occupant and sales tax falls on purchaser)

INCOME CLASS	Percentage of Income Taken by Tax					
	Omaha-Council Bluffs			Three Middle-sized Cities		
	Owned homes	Rented homes	Sales tax replacement	Owned homes	Rented homes	Sales tax replacement
$ 250- 499	.....	.....	.....	8.42	4.20	5.54
500- 749	2.69	3.10	3.83	4.65	2.97	4.39
750- 999	3.61	2.64	3.65	4.09	2.56	4.24
1,000-1,249	2.98	2.46	3.59	3.60	2.45	3.89
1,250-1,499	2.51	2.14	3.39	3.19	2.14	3.79
1,500-1,749	2.41	2.12	3.21	2.94	2.08	3.59
1,750-1,999	2.49	1.96	3.14	2.44	2.08	3.38
2,000-2,249	2.24	1.85	3.04	2.41	2.05	3.40
2,250-2,499	2.12	2.03	2.82	2.06	2.06	3.21
2,500-2,999	2.10	1.75	2.79	2.38	2.03	3.00
3,000-3,499	2.04	1.89	2.68	2.31	1.79	2.83
3,500-3,999	1.81	1.53	2.45	2.15	1.88	2.76
4,000-4,999	1.84	1.78	2.36	1.94	1.56	2.53
5,000-7,499	1.84	1.15	2.57	1.87[1]	1.28[1]	1.99[1]
7,500 and over	1.20	.77	2.19	.....	.....	.....

* *Source:* U. S. Bureau of Labor Statistics, *Family Expenditures in Selected Cities, 1935-36.* Bul. 648, Washington, 1941, pp. 118, 187, 197 and 130, 192, 199.

[1] Income class, $5,000 and over.

tenants (who presumably are in relatively lower income groups) will benefit. The ability of the landlords to maintain the previous level of rents will depend, not only on the nature of the demand for housing facilities, but also on the volume of new construction in relation to that demand. Such considerations will exert a predominant influence on the final results of any program of property tax reduction. In each case, therefore, all these factors must be examined before the nature of the final effects can be determined with any degreee of exactitude.

The objections to the substitution of a sales tax for the property tax as a relief from the burden on shelter may be summarized as follows:

1. Even on the unlikely assumption that the tenant bears all the landlord's taxes (and that the property tax is confined to and covers all housing), the improvement in the distribution of taxes would be uncertain and sporadic.

2. On the assumption that the landlord's taxes are partly capitalized or absorbed by the landlord, the householder would lose more by the shift than he would gain. This would be accentuated were property tax relief general rather than confined to residential property. If relief were confined to home owners, the large number of tenants would be hit by both the property tax and its substitute. If we are to attempt relief for the "little fellow" by exempting his house but taxing his food, the odds are much against the success of the program.

This is not to argue that the property tax is a fair and equitable means of raising revenue. Its regressivity is impressive and there may well be much better ways to finance present and future governmental requirements. But if regressivity and burden on the "little fellow" are to be the criterion, the sales tax as a replacement does not seem to be the answer.

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A Neglected Factor in Estimating Housing Demand

HOUSING market studies are usually based on the assumption that the quantity of the housing demand is determined by the number of families, whereas quality and price or rent range are functions of family income. Not always is it realized that the number of families is itself largely a function of income. Although it is generally recognized that the income level may influence the quantitative demand indirectly by influencing the marriage rate and directly by raising or lowering the number of families living "doubled-up," little attention has been paid to the influence of income changes on the number of households occupied by families[1] not consisting of husband and wife.

However, many dwelling units are occupied by such "incomplete" families. The 1940 U. S. Census showed 20,597,520 urban households ("occupied dwelling units"). This is almost 25% more than the number of "married couples living together," which was 16,526,080. The difference of over four millions represents the number of "incomplete" families forming their own households minus the number of "complete" families living in the households of others.

The extent to which incomplete families will form separate households will depend largely on economic conditions. With rising incomes they will be able to rent an independent dwelling unit and possibly also to afford the services of laundries and restaurants instead of rooming and boarding with other families. It stands to reason that the effective demand of the incomplete families is the most elastic element in the entire housing picture. Should the widespread assumption of continued full employment and high incomes in the post-war period prove correct, and/or should the equally widespread hopes for lower cost of housing be realized, this element may increase the demand for housing far beyond current expectations.

The following analysis constitutes an attempt to develop methods for estimating the limits within which this demand factor may become effective. These limits are maxima which can be attained only if rising income and falling rents cooperate to bring about a revolutionary change in the ratio of income to rent. A smaller change in this ratio may be expected to result in a correspondingly smaller increase in demand.

The estimates made in this study are not to be taken as attempts to determine accurately the extent of this increase but are merely intended to ascertain the order of magnitude and the complexity of the problem.

First Estimate: Based on United States' Figures

Table I is based on the assumption that a separate dwelling unit would be claimed by every married couple living together, by every widowed, divorced, or separated man or woman regardless of age, and by every single person 25 years of age or over. This theoretical maximum demand exceeded, for all urban places in 1940, the number of all existing urban dwelling units by more than ten millions.

A different approach has been used in Table II. Here all married couples and all single (including widowed, etc.,) persons over 25 living in households of others have been assumed to be potential claimants for separate dwelling units. The sum total of these groups exceeds the number of existing households by almost eleven millions.

Both methods show a theoretical maximum demand of 31.6 millions. This exceeds the number of existing households by 52.3% and the number of all dwelling units (including vacancies) by 46.3%.

In order to bring this purely theoretical maximum closer to reality, certain guesses have been made as to the percentage of individuals in the various categories who

TABLE I. EXCESS OF POTENTIAL HEADS OF HOUSEHOLDS OVER DWELLING UNITS: URBAN POPULATION OF UNITED STATES, 1940*

Married couples living together	16,526,080
Other marital status, male	2,582,280
Other marital status, female	5,454,960
Single, male, over 25 years of age	3,732,480
Single, female, over 25 years of age	3,322,660
All potential heads of households	31,618,460
All existing dwelling units	21,616,352
Potential Deficit	10,002,108
Potential Deficit in % of Existing Supply	46.3%

* *Source:* U. S. Census, Series P-14, No. 12, Table 3

[1] The 1930 Census defines a "family" as "a group . . ., who live together as a household. Single persons living alone are counted as families . . . as are . . . groups of unrelated persons."

might be expected to form separate households if they could afford to do so. It would be highly desirable to break these categories down into age, income, social and professional groups, also by size of city and national and religious groups. With the aid of detailed studies of the behavior of such special groups more specific and realistic forecasts could be made. As shown in the last column of Table II-B, under these assumptions the number of households would still increase by 26.2%.

Detailed behavior studies might also be helpful in estimating the percentage of single persons who may prefer to form a household together with another single person, a friend or a relative. If we tentatively assume that this will obtain in half of all the cases, the increase in households would still equal 20.9%. This figure may be reached if national income is permanently kept at or above 120 billion dollars of pre-war purchasing power, if housing cost remains constant or decreases and if competing demands do not substantially reduce the proportion of the income available for housing. Because of the change of habits involved, the additional demand would probably become effective only gradually. However, any long-term estimate of the total *maximum* housing demand should add this 20% (of the existing number of households) to the increase in the number of normal families and to the demand for the replacement of obsolete units. The addition would also result in a qualitative change, increasing the emphasis on small units predominantly for rent.

TABLE II. POTENTIAL HOUSING DEMAND OF PERSONS LIVING IN HOUSEHOLDS OF OTHERS: URBAN POPULATIONS OF UNITED STATES, 1940*

A. In Absolute Numbers, by Groups

CHARACTERISTIC OF GROUP (Relation to Head of Household)	Total Number in Group	Estimated Probable Demand	
		% of Group	Number
1. Married couples, not relatives of head	322,000	90.0	289,800
2. Married couples, relatives of head	955,420	80.0	764,336
All married couples	*1,277,420*	*82.5*	*1,054,136*
3. Male over 25, not relative of head	2,146,740	60.0	1,288,044
4. Female over 25, not relative of head	1,620,060	70.0	1,134,042
5. Male over 25, relative of head	2,436,000	40.0	974,400
6. Female over 25, relative of head	3,365,160	30.0	1,009,548
All single persons over 25	*9,567,960*	*46.3*	*4,406,034*
TOTAL POTENTIAL DEMAND	10,845,380	50.1	5,460,170

B. As Percentage of Existing Households

GROUP	Number	% of Existing Households
Existing households	20,766,260	100.0
Groups 1 to 6 (above), living in households of others	10,845,380	52.3
Estimated Probable Demand (according to 2 above)	5,460,170	26.2
Deduction of one-quarter of groups 3 to 6	1,101,508	.....
Estimated probable demand if one-half of all single persons establishing separate households double up with other single persons	4,358,662	*20.9*

*Source: U. S. Census, Series P-14, No. 12, Table I.

Second Estimate: Based on Figures for Pennsylvania

A check on this preliminary result may be made by the use of the more detailed data which are available for the state of Pennsylvania (Tables III, IV, V). Similar data will be published for the United States by the Bureau of the Census; it seems unlikely that they will show very significant differences from the percentages found in the Keystone State.

Table III shows the numerical importance of the various groups not forming part of a normal-sized family. Almost one quarter of all households are formed by incomplete families (III-A). In all households, normal or otherwise, almost 10% of all members do not belong to the family of the head of the household (III-B). Their number exceeds considerably the number of single (including widowed, etc.,) persons heading separate households and is almost half as large as the number of "normal" households. Unmarried persons 25 years or over (III-C) are seventy-seven per cent as numerous as are married couples with the husband in the same age group. This means that the

theoretical maximum housing demand exceeds the number of married couples by 77%.

Table IV-A shows the present number of normal and non-normal households. Table IV-B sums up the various categories composing the potential maximum total of households and shows that this figure exceeds the actual total of households by almost one and a half million, or 58%. The same maximum exceeds the total supply of dwelling units (including vacancies) by 1.36 millions, or 52% (IV-C).

TABLE III. NUMERICAL IMPORTANCE OF GROUPS NOT FORMING PART OF A NORMAL-SIZED FAMILY: PENNSYLVANIA, 1940*

A. Type of Household

HEAD OF HOUSEHOLD	Number	% of Total
Husband and wife	1,907,650	75.7
Woman alone	388,523	15.4
Man alone	223,597	8.9
Total	2,519,770	100.0

B. Persons Other Than Husband, Wife, Children, Grandchildren, and Minor Relatives (Under 20) Living in Households

GROUP	Male	Female	Total
Parents	49,182	111,308	160,490
Other relatives	194,005	185,792	379,797
Lodgers	199,530	116,220	315,750
Servants	15,865	59,323	75,188
(a) Total Four Groups	458,582	472,643	931,225
(b) All Persons Living in Households	4,843,866	4,861,067	9,704,927
"a" as a percentage of "b"	9.5%	9.7%	9.6%

C. Persons 25 Years of Age and Over

GROUP	Number	% of Total
Single	924,043	16.4
Widowed	586,591	10.4
Divorced	54,252	1.0
Total Unmarried	1,564,886	27.8
Total Population	5,617,686	100.0

Married 4,052,800
Ratio of Unmarried Individuals to Married Couples ..... 77 : 100

* *Source:* U. S. Census, Series P-17, No. 46.

All categories of persons now living in the households of others and representing a potential demand for housing are summarized in Table V. They would add 48.9% to the number of existing households. This theoretical potential demand has been reduced by estimating, for every category, a percentage of persons who might be expected to form their own households if they could afford to do so. In the absence of studies on the actual behavior of the various groups, these estimated percentages are tentative. The resulting "estimated potential demand" is given in the last column of Table V. It exceeds the total number of existing households by 26.3%. Assuming again that one half of all single persons establishing their own households may "double up" with another single person, the percentage is reduced to 20.4%. This

TABLE IV. NUMBER AND TYPE OF DWELLING UNITS AND FAMILIES: PENNSYLVANIA, 1940*

A. Type of Occupancy of Dwelling Units

By single persons	160,227
By other "non-normal" households	452,491
By "non-normal" households	612,718
By "normal" households	1,907,052
Total Occupied Dwelling Units	2,519,770

B. Potential Maximum Need for Dwelling Units

Married persons living separated	444,056
Widowed persons	578,375
Divorced persons	56,058
Single persons 25 years and over	924,043
Potential Heads of "Non-normal" Households	2,002,532
"Normal" families living in own household	1,907,052
"Normal" families living doubled-up	75,600
Potential Maximum Total of Households	3,985,184
Actual total of households	2,519,770
Potential Maximum Increase in Households	1,465,414

C. Potential Maximum Deficit of Dwelling Units

Potential maximum total of households	3,985,184
Total existing dwelling units	2,618,967
Potential Maximum Deficit of Dwelling Units.	1,366,217

* *Source:* U. S. Census, Series P-17, No. 48.

figure checks closely with the result of our first estimate.

Significant Ratio

It appears that the establishment of separate households by incomplete families may result in an extraordinary increase in the number of households. During the last 50 years the number of households has increased much faster than the population; or, expressing the same fact in another way, the average size of the household has decreased. This decline is due partly to the decrease in the number of children per married couple and partly to the lengthening of the average life span, resulting in a larger

TABLE V. POTENTIAL HOUSING DEMAND OF PERSONS OVER 25 AND OF MARRIED COUPLES NOW LIVING IN HOUSEHOLDS OF OTHERS: PENNSYLVANIA, 1940*

A. IN ABSOLUTE NUMBERS

CHARACTERISTIC OF GROUP	Total Number	Estimated Potential Demand	
		% of Total	Number
Fathers in household of children	49,182	50	24,591
Mothers in household of children	111,308	30	33,392
Male children 25 years and over	287,094	50	143,547
Female children 25 years and over	261,542	40	104,617
Other male relatives 25 years and over	163,606	60	118,164
Other female relatives 25 years and over	153,713	70	107,599
Male lodgers 25 years and over	159,499	60	95,699
Female lodgers 25 years and over	77,927	90	70,134
Servants and hired hands 25 years and over	51,340	60	30,704
All Persons Over 25 Living in Households of Others	1,315,211	54	728,447
Married Persons Living in Households of Others	155,000	85	131,750
Potential Demand of Unmarried Adults Living in Households of Others	1,160,211	51	596,697
Married Couples Living in Households of Others	77,500	85	65,875
Total Potential Demand	1,237,711	53	662,572

B. AS A PERCENTAGE OF EXISTING HOUSEHOLDS

GROUP	Number	% of Existing Households
Existing households	2,519,770	100.0
Total of all groups enumerated in 5A (above)	1,237,711	48.9
Estimated probable demand according to 5A	662,572	26.3
Deduction of one-quarter of all unmarried adults living in households of others	149,174	.....
Estimated probable demand if one-half of all single persons establishing separate households double up with other single persons	515,398	20.4

* *Source:* U. S. Census, Series P-17, No. 48.

number of old couples. The question arises as to whether it is to some extent caused by an increase in the number of incomplete families and/or an increased establishment of separate households by such families. This change could be gauged by measuring the excess of the total number of households over the number of normal households. Unfortunately, neither the number of such households nor the number of "married couples living together" has been reported prior to 1940. However, the number of married women has been reported by the United States Census since 1890. The ratio of occupied dwelling units to married women may be expected to reflect changes in the number of incomplete families occupying separate households. This ratio is shown for ten-year intervals from 1890 to 1940 in Table VI-A.

TABLE VI. RATIO OF OCCUPIED DWELLING UNITS* TO MARRIED WOMEN: UNITED STATES, 1890-1940; VARIOUS POPULATION GROUPS, 1940; AND IN CERTAIN SELECTED STATES, 1940

A. United States, 1890-1940

Year	No. of Married Women (X)	No. of Occupied Dwelling Units (Y)	Ratio (Y : X)
1890....	11,124,785	12,690,152	114.1
1900....	13,810,057	15,963,965	115.6
1910....	17,684,687	20,255,555	114.5
1920....	21,318,933	24,351,676	114.3
1930....	26,170,756	29,904,663	114.3
1940....	30,087,135	34,855,552	115.8

B. United States, Various Population Groups, 1940

Group	No. of Married Women (X)	No. of Occupied Dwelling Units (Y)	Ratio (Y : X)
Rural farm....	6,365,924	7,106,559	111.6
Rural non-farm	6,185,943	7,151,473	114.0
Urban...	17,535,268	20,596,500	117.4
White...	27,276,696	31,561,126	115.3
Non-white....	2,810,439	3,293,406	117.2

C. Selected States, 1940

Five Lowest Ratios		Five Highest Ratios	
North Carolina	107.0	Nevada	130.6
West Virginia	109.4	Montana	129.3
Virginia	109.7	Washington	128.1
Tennessee	110.0	California	127.3
Alabama	110.6	Oregon	125.3

*For 1900, 1910 and 1920—"private families": for 1890 and 1930—"families."

Table VI-A reveals the astonishing fact that during half a century this ratio has remained almost constant (115 households to 100 married women). The variations are less than 2%. As pointed out above (Table III-C), in 1940 the number of unmarried persons over 25 exceeded the number of married men in the same age group by 77%; yet the excess of households formed by such persons over the total number of married couples continues to hover around 15%. At first sight this seems to contradict our previous deductions. The investigation must be carried one step farther in order to explain the reasons for this constancy.

The excess of occupied dwelling units over the number of married women is not identical with the number of incomplete families occupying separate households because the number of married women is not identical with the number of normal households. Doubled-up couples and married women living alone must be deducted. As shown on Tables I and II, out of 16,526,080 married couples living together, 1,277,420 or 7.7% lived in households of others. The 1940 Census showed that 5.2% of all married women were not living with their husbands. The figure showed a significant variation from 4.3% for white women to 14.3% for non-white women. There have also been slight changes in the definitions adopted by the United States Census. It is conceivable that changes in these three variables have cancelled out some changes in the number of households of incomplete families and that the constancy of the ratio is the result of a chance equilibrium between two trends moving in opposite directions. It is also possible that some oscillations in the ratio have occurred in years between the Census counts, none of which chanced to coincide with an extreme phase of the business cycle.

That the constancy of the ratio may not hold good for all time is indicated by its wide variation in space. Variations existing in 1940 between urban and rural population (Table VI-B) and between various states (VI-C) are considerable; the span be-

tween the low (107.0 for North Carolina) and the high (130.6 for Nevada) is 23.6% of the number of married women in these states. Generally, the three Southern regions and the industrial states of New Jersey and Michigan show the lowest values and the Pacific and Mountain states the highest. The New England and West North Central states also show high ratios. This may be a result of the migration losses suffered by these states, while the high ratio in the mountain states is certainly to some degree the result of an abnormally high proportion of adult males. The higher ratio for non-whites (Table VI-B) must be attributed to the high percentage of married women not living with their husbands which apparently overcompensated for the economic factors tending to restrict the establishment of separate households.

However, the low ratio which prevails throughout the south (with the exception of Florida), despite the high percentage of non-whites in these states, as well as the high ratio on the Pacific coast must be ascribed to low and high income levels respectively. For populations of equal age, sex, and family composition the ratio of income to housing cost (rent) appears to be the decisive factor. It would be highly desirable to investigate the correlation between this ratio and the ratio of occupied dwelling units to married couples living together. Such an investigation transcends the limits of this study. The assembled data, however, are sufficient to suggest that the astonishing constancy of the ratio of households to married women through six successive Census counts is a result of the constancy of the ratio of income to rent.

Reaction of Income Level on Rent Level

Available data indicate that this ratio has indeed varied only within rather narrow limits.[2] Effective demand for housing closely parallels the national income. Because of technical limitations, the equivalent expansion or contraction of supply cannot be effected by increase or decrease of volume, as is true of most other commodities, but is achieved by increase or decrease of the price (or rent) of a substantially identical volume of housing. Within the short span of the business cycle, the change in the rate of construction caused by these price changes has never been sufficient to substantially influence the volume of supply.

However, if the increase of supply by new construction, stimulated by high incomes and high rents, were to last long enough, the price (rent) of a house would be reduced by competition to the level of the cost of reproduction, which in turn might be further reduced by mass production for a permanent big market, and the percentage of the individual income needed for renting one unit would decrease. The ratio of income to housing cost, which has so long been constant, would undergo a radical and permanent change. There is good reason to believe that once the constancy of this basic ratio no longer holds, the constancy of the ratio of households to married women will also disappear. Other things being equal, a great number of incomplete families may be expected to enter the market. If we really succeed in securing a *permanent* high income, a substantial increase of the effective demand for housing from this source should be the result.

Rent Control and Housing Demand

At present, the percentage of income spent for housing has been considerably reduced by rent freezing. The result is a greatly increased (potential) effective demand which cannot be satisfied because of shortages of material and labor. Millions of families could afford to pay for better accommodations than they occupy at present. If rent control is continued after the war, this demand will make itself strongly felt. If it cannot be satisfied by unaided private enterprise, it may lead to strong pressure for governmental action in support of low-cost housing. Whatever the means employed, the result will be the same. As long as prices for new construction can be kept at a level that makes it possible to compete with controlled rents of existing houses, the demand will induce a vast increase of residential construction. This is exactly what happened in most European countries after the last war; it was this peculiar situation which gave birth to their much-admired achievements in the field of housing during the twenties.

It is not unlikely that under such conditions the volume of residential construction will be greater than if we discontinue rent

[2] Lowell J. Chawner, *Residential Building*, National Resources Committee, Housing Monograph Series 1, U. S. Govt. Printing Office, Washington, 1939, p. 11.

control. In the latter case, the resulting high rents, promising high immediate profits, would certainly act as a stimulus. But, on the other hand, high rents would strongly contribute to an inflated general wage and price level and the resulting insecurity as to long-term returns on the investment might have a paralyzing effect. Only if and when the high level of income is permanently maintained would this hesitation gradually disappear.

Whatever the policy adopted as to rent control, a permanent high level of national income is bound to result in a vastly increased demand for separate dwelling units by incomplete families. If, in addition, the cost of new housing is substantially reduced, the housing market may witness an expansion of as much as 15% to 20% over and above the market created by the need for replacement and by the increase in the number of normal families.

(The views and opinions expressed in this article are the author's and are not necessarily representative of those of the Philadelphia Housing Association.)

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Soldier Settlement in Agriculture

ONE of the major problems that confront agriculture today is the readjustment of returning veterans and war workers in the agricultural industry. Pressures are being brought by certain individuals, groups, and agencies such as land "boomers," railroads, public agencies holding cheap land, and those who believe that an expanded farm population is desirable, to give an impetus to a general, widespread land settlement movement including homesteading on the public domain.

Past experience is usually a good base upon which to build a policy and a program. Certain states had some rather unfortunate experiences with soldier settlement after the last war. This is particularly true of California, Washington and Minnesota.[1] As was true of many state and foreign settlement schemes, the California experience—the most ambitious in this country—failed because even the best lands available for purchase involved costs which could not be met from the earning capacity of the land, the prevailing low market prices, poor supervision, and lack of settler responsibility.[2] It has become increasingly clear that very often land settlement has been successful only when established on the debris of sunken capital and the life's work of two or three previously unsuccessful farmers. This is a very sobering statement but the history of land settlement will bear it out.

Much that has been said about the California experience holds true for Canada's experience after the last war[3] There the over-capitalization of land and the subsequent low market values for agricultural produce have been considered the primary reasons for the failure of soldier settlement in Canada.[4] In addition, such factors as poor soil, lack of an adequately trained staff, and the implicit assumption that the settler was to derive his main income and livelihood from the land, added fuel to the fire of failure.

Past experience both in this country and in Canada has certainly been considered in the formulation of recent proposals for the readjustment of veterans in Wisconisn. With these facts in mind, let us briefly examine the Wisconsin Report which deals primarily with the rehabilitation of its returning resident veterans in agriculture.[5]

At the present time no accurate data are available on the probable demand for farms by veterans but a conservative estimate is made that some 50,000 Wisconsin veterans

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[1] W. A. Hartman, *State Land Settlement Problems and Policies*. U. S. D. A. Tech. Bul. 357, May, 1933.

[2] Roy J. Smith, "The California State Land Settlements at Durham and Delhi," *Hilgardia*, Calif. Agr. Expt. Sta. Bul. 5, October, 1943; especially pp. 489-491.

[3] Robert England, *Discharged—A Commentary on Civil Re-Establishment of Veterans in Canada* (The Macmillan Company of Canada), pp. 265-297 inclusive.

[4] A statement made by the Honorable Ian A. Mackenzie, Minister of Pensions and National Health in Ottawa, when introducing the Veterans' Land Act; see also Ian A. Mackenzie, "Canada Cares for Its Heroes," *The American*, February, 1944.

[5] This report was compiled by a special committee composed of technical agriculturists in the College of Agriculture, representatives of the State Department of Agriculture, the Veterans' Recognition Board, and the Attorney General's office. As public servants, they were asked to submit their recommendations as a report to the governor and the legislature.

may be in the market for full-time farms. This does not include the thousands of war plant workers or farm tenants who will be in a position to buy farms and are in fact already doing so. Both of these groups will compete directly with the veterans for available farms.

Although the report deals primarily with full-time farming, it is recognized that part-time farming, country homes, rural residences, and garden farms are definitely in the picture. It is quite possible that some veterans as well as ex-war workers will be attracted to these types of places.

It is estimated that the state has 186,000 going farm units, one-third of which are operated by farmers over fifty-five years of age. Some 50,000 farms will change ownership in the next ten years. Approximately one-third of these are "earmarked" for sons at home or present tenants. Therefore 33,000 farms may be made available to others looking for farms. Of this 33,000, about 25,000 will be available to new owner-operators and 8,000 to tenants.

As far as new farms are concerned, it is liberally estimated that no more than 5,000 new units could be created in the cut-over areas if the standard of 60 acres crop and 60 acres pasture out of a total acreage of 160 acres per farm is maintained. As will be noted later, this is merely a potentiality and the 5,000 new farms, though physically possible, are not assumed to be economically feasible.

The report does not propose that the state enter the real estate business nor that it give grants sufficient to finance any and all veterans wishing to enter agriculture as full-time farmers. The primary interest is to give adequate guidance and advisory service. Such services include: (1) Information on the availability of farms for sale or for rent. (2) Information on the availability of agricultural credit. (3) Appraisal guidance. (4) Evaluation of veterans' farming capabilities. (5) Guidance in financing or leasing arrangements. (6) Guidance in selection of farms, enterprises, equipment, and stock. Because ample sources of credit are available, it is deemed more feasible to give the veteran guidance in obtaining a suitable farm under proper credit terms.

Obviously, state grants could not be so large as to enable full payment for a productive farm unit, but grants up to a few hundred dollars might be enough to help measurably in making a down-payment on a farm or to secure equipment or to obtain chattel loans from other agencies. If such grants were made available without restrictions, there would be a real possibility that the financial assistance would hurt the future security of the veterans more than it would help. It is therefore urged that state agricultural grants be made only as a part of a particular veteran's plan for becoming established on a farm. The state board should make the aid available only when it is clear that such assistance will help a veteran to get started on a sound program of farm entrepreneurship. The grant would also act as an inducement to encourage the veteran to seek the necessary advice and guidance. Governing conditions of the grant include: (1) Farming experience and physical capability of the veteran. (2) Productivity of the farm. (3) Reasonable appraisal of the farm's value. (4) The equity of the veteran in the farm enterprise. (5) Terms under which the veteran may get loans from other agencies. (6) The need for a grant to make the realization of the plans possible.

The state's interest in rural rehabilitation for the veteran should not be restricted to a grant of funds made conditional upon his plans for starting to farm. It should have an active guidance and advisory service to assist veterans in finding existing farms for sale or for rent, to actually help them gain access to the resources of reliable credit agencies and to assist them in the selection of farm enterprises, stock and equipment, as well as in the problems of farm management. Some of these services may be made available in part through existing agricultural agencies. But there should be specific provision that these services will be available on an individual basis if needed and that the veteran's interest will be promoted so far as possible by competent and sympathetic public agents.

The suggestions made in the Wisconsin report were offered as a guide for the Veterans' Recognition Board, which has been in existence under a law that gives it broad authority for helping returned servicemen. This board is charged with the coordination of all activities concerned with the rehabilitation of returning resident veterans.[6] It consists of five members appointed by the governor by and with the advice and consent of

[6] *Wisconsin Laws*, Chapter 443, Laws of 1943.

the senate. The governor and a representative of the adjutant general's department designated by the governor are also ex-officio members. The administrative functions of the board are in charge of a director appointed by the board for an indefinite term.

Recently the board, acting on the committee's suggestion, appointed an Agricultural Advisory Committee to help formulate a policy and to keep the board informed of pertinent events and current programs.

The board is following the policy suggested in the report of not engaging in loaning operations for either farm real estate or chattels, nor in land clearing, colonization, or development projects.

Summarizing, the Wisconsin situation looks something like this:

It is reasonable to assume that some veterans will want farms, and that veterans will be at a competitive disadvantage with war workers, land companies, and tenants. It is likely that the veterans and others interested in obtaining land will try to enter the agricultural industry when land values are inflated, and if past experience is a criterion, their products will be marketed at deflated prices. In spite of the fact that agricultural need might not warrant new settlement, veterans will be encouraged by various pressure groups to foresake their better judgment and to enter upon such ventures.

Under the Wisconsin Plan the primary emphasis will be on the replacement of retiring farmers rather than on the creation of new units. Ownership within a lifetime is a goal, but provisions adapted to leasing and a tenant form of farming will have to be provided. Any program is to be inserted within the present framework of rural zoning and public forest land management.

The state must assume the responsibility of giving adequate advice and supervision. It will not offer cheap and liberal credit, but will give a small contingent grant. The grant will be given as an integral part of, and will add effectiveness to, a strong program of guidance and advisory service to direct qualified veterans to productive farms under favorable conditions of holding and operation. The details of administration are to be left with the Veteran's Recognition Board.

Certain problems, rather fundamental to the success of any settlement program, are raised by this state report and by the current wave of interest in agricultural readjustment of veterans, and a more complete discussion of these issues is in order. These problems have relevance to any veteran readjustment schemes, whether they be state, federal, local, or private.

If we are to have new settlement, or for that matter resettlement, the assumption must be that we are in need of an expanded agricultural plant. What, then, are the factors that condition this need? The production optimists point out that we will be required to help substantially in feeding the rest of the war-torn world.[7] The most liberal estimates are that this will probably be true for a period of no more than three years. If the war has proved anything, it has demonstrated the remarkable recuperative powers of agricultural areas as evidenced by the reoccupied areas of Russia. Essentially, the urgent food needs will probably not be in cereals but rather in meats (mainly hogs and cattle) and poultry. A second point to be raised that should dampen the ardor of the optimists is the fact that Canada, Argentina, Australia, and New Zealand will also have exportable agricultural products in direct competition with the United States—a competition, if previous history is a gauge, in their favor.

We do well to ponder before we decide that additional land should be brought into production. The way things look today, the returning veteran may get nicely settled and into production just when his products become a drug on the market. This is the critical time for him. He will then be in the process of paying for land and equipment, probably purchased at inflated values, when his products are selling at deflated prices. It will be the old story over again—impossible debts, low prices, and economic and social failure. This is not a pretty picture to paint for the veteran, but it can happen again!

The same analysis seems appropriate on a national basis. It is highly questionable whether we need an agricultural plant the size of the pre-war one, let alone an expanded industry. No one will deny that we did a very good production job in 1942 and 1943 and with considerably less workers. In fact, we reached an all-time production record in 1943 with about 5 per cent fewer agricultural

[7] Joseph S. Davis, *Food as an Implement of War*, War-Peace Pamphlet 3, Food Research Institute, Stanford University, p. 3.

workers than in the period 1939-1941. Of course, the farmers were working longer hours but other factors such as technological improvements cannot be discounted.

Another argument advanced for an expanded agriculture by the optimists is that, if we were to raise our nutritional standards to an adequate level for the total population, we would be forced to add additional units of production. This assertion is highly controversial and open to question. To be sure, there will be necessary and desirable shifts in types of food products in order to meet the needs of an older population that is less active in an energy food sense. There is every reason to believe that the return of the temporary war workers, conservatively estimated at one million, would in itself satisfy the needed labor even *if* we grant the assumption that an adequate standard of living would necessitate a greater agricultural production than was reached during the period from 1936 to 1940. This precludes the possibility of the addition of some two million returning veterans who left the rural areas. In spite of our food production optimists, any expansion of the agricultural industry even over the 1942 level will by nature be a temporary thing both internationally and nationally.

It should also be emphasized that the agricultural plant will be enlarged without any further public encouragement. Millions of acres of productive land are being added in the Mississippi Delta and in the already existing irrigation projects, notably the Grand Coulee. The "plant" within the existing farms is also being made more productive by better land use and reclamation. According to the 1940 census, there are 42 million acres now "within the line fence" that can be added to the crop area by clearing, 8 million by drainage, and 6 million by irrigation.

In addition to the production optimists, we have another group that can appropriately be labelled population optimists. Their basis for returning veterans to land seems even more untenable; namely, that a rapid growth in population in this country and in the nations likely to import foods from us is a foregone conclusion. What little expansion of population will take place in this country can in all probability be taken care of through technological advancement in crop production and a more efficient use of our present land. The picture in terms of prospective markets in countries abroad is purely conjectural, and veterans can't be settled on land upon a program of conjectures.

In spite of much evidence to the contrary, there are many groups advancing schemes which would upset the "fair-share" concept; i.e., that agriculture should absorb its fair share of returning veterans. Some are again advocating, notwithstanding past experience, that agriculture become a "catch-all." Agriculture, or simply raw land, is to some people a "cure-all" that will alleviate unemployment and automatically right a dislocated industrial economy.[8] They fail to realize that even in normal times agriculture has surplus labor available for any unused agricultural resources and for other industries. The whole problem of agricultural need and land settlement requires careful study to counteract the many palliatives already in the legislative hoppers.

In spite of the arguments against post-war settlement, there are some who take the attitude that there will be a back-to-the-land movement whether we want it or not. If we grant this assumption, our first objective should be to safeguard the sound land use programs and restrictive controls undertaken by state and federal governments designed to correct present maladjustments —largely headaches of World War I.

It has taken 25 years for Wisconsin to evolve the present land program, to restrict five million acres against agriculture and year-long residence, to place almost two million acres in country forest, to establish state and federal forest, and to relocate one thousand settlers who were non-conforming users stranded on submarginal land or who lived isolated in the wilderness. These programs are by no means completed.[9]

[8] *Demobilization and Readjustment*, Report of the Conference on Post-War Readjustment of Civilian and Military Personnel, National Resources Planning Board, June, 1943.

[9] George S. Wehrwein, "The Administration fo Rural Zoning," *The Journal of Land & Public Utility Economics*, August, 1943. "Zoning can become truly *directive* and not merely preventive. In spite of the five million acres closed to agriculture, there are still other millions not in farms and outside of the restricted areas . . . much of it is also submarginal for agriculture and should be restricted if zoning is to prevent settlement on land because of soil quality, location, and isolation." (p. 191). A comparison of the land considered submarginal for agriculture by the County Land Use Committees with the area restricted against agriculture by zoning, indicated clearly that the zoning pro-

(Footnote 9 continued on page 274)

This is recognized by the local people in their County Land Use Planning Reports. In eleven northern and central Wisconsin counties for which reports are available, the county committees recommended the retirement of 162,242 acres of land now in farms, and considered another 476,556 acres of farm land "questionable" for agriculture. (Table I). If the recommended land use adjustments were carried to completion, almost 10 per cent of the area of these counties would be shifted from farm to non-farm use. Those who dread a back-to-the-land boom know that such an adjustment will not take place when everybody is talking of bringing more land into farms and of settling veterans on land. They are afraid that instead of adding more submarginal land to the restricted areas, the drive will be toward opening zoned land to settlement by changing the boundaries of the restricted district or by repealing the zoning ordinances altogether. That this fear is not unfounded is indicated by "Settlement Plan" of one of the northern Wisconsin counties. In this county it is proposed to sell land now under the Forest Crop Law to returning soldiers, but it is stated that "only land suitable for agriculture" will be so withdrawn and sold to veterans. Why forest crop land should be selected for sale to soldiers when more than half of the county is not in farms, not zoned, and not in county forests, is difficult to understand. Furthermore, the land to be withdrawn reverted to the county for taxes shortly after World War I and its submarginal character was acknowledged by the local officials when it was accepted for forest crop entry.[10]

TABLE I. CLASSIFICATION OF LAND BY COUNTY LAND USE PLANNING COMMITTEES IN ELEVEN NORTHERN AND CENTRAL WISCONSIN COUNTIES, 1940-1942

CLASSIFICATION	Acres	Per Cent of Total
Land in farms which:		
(a) should be put to other uses..	162,242	2.4%
(b) is questionable for farming..	475,556	7.0
(c) should remain in farming...	2,162,672	31.9
Total Land in Farms.....	2,800,470	41.3%
Land not in farms:		
(a) which should not be used for farming.....	3,485,198	51.4%
(b) suitable for farm development.....	497,191	7.3
Total Land not in Farms.....	3,982,389	58.7%
TOTAL AREA.....	6,782,859	100.0%

The second feature of guidance in veteran settlement should be the prevention of the settlement of submarginal land and isolated settlement; but zoning is not enough. As indicated above, not all poor land has been restricted against agriculture, and the veteran is still in danger of buying land not suitable for farming. In the eleven counties with County Land Use Planning Reports, 497,191 acres of land not now in farms were classified as "suitable for agricultural development." It is interesting to note that more farm land was slated for retirement to other uses than nonfarm land declared "suitable" for farming. The above figure was used to arrive at the 5,000 new farms physically available in northern and central Wisconsin. However, the actual number of farms *economically* feasible will probably be nearer 2,000 than 5,000. The writer recommends that complete soil surveys and other studies be made before any tract is offered for settlement.

The Wisconsin Report makes it quite clear that, if at all possible, the returned veteran should be settled on existing farm units, and that, if new settlement has to be instituted, all the pitfalls should be fully investigated. The veteran should be made fully aware of the social and economic costs he will be asked to bear. There are many problems involved in new settlement and it would be tragic if the veteran were not fully informed of the many difficulties which he would have to face if he decided to take up new land. He must recognize that it will be many years before he will be in a position to make a livelihood from his new farm and that he will be forced, in all probability, to supplement his income

(Footnote 9 continued from page 273)

gram is not yet consummated. One of these counties has less than one-fourth of its area in land classified as suitable for agriculture, yet has enacted no ordinance to restrict the use of the land against farming. All the other counties might well increase the area in forestry and recreation districts if they want to prevent settlement on the land designated as submarginal by the local land use planning committees. This does not mean however, that scattered tracts of submarginal land should be placed in a restricted district, thereby creating a multitude of small districts in which non-conforming users do not cause extra cost for public services.

[10] "Douglas County [Wisconsin] Makes Plans for Soldiers," *The Stock and Dairy Farmer*, January, 1944.

from other sources. He will also have to recognize that there are tremendous social and economic costs involved in settling new areas, such as the building of roads and schools as well as the economic burden of community services. Above all, it must be drawn to the veteran's attention that he will be forced to lower his standard of living and that in all probability he will be socially and economically isolated for a number of years. In addition, the state and community may have to face the economic cost of clearing and draining the new farm land before the new unit can be considered a going concern. Again, it would seem that the state could best serve its purpose by acting as a guidance agency and as a deterrent to some over-ambitious land schemes.

The problems discussed at this point deal primarily with settlement on existing farms, but they are inherent to a greater or lesser extent in the settlement of new land.

One of the greatest dangers connected with the ownership of land, particularly at the time when the veteran intends to enter the industry, is the problem of inflated land values. It has been suggested that the state might obtain title or option to buy farms that could later be taken over by veterans. Canada is following this procedure to a limited extent. Such a scheme, however, is not without difficulties. One may expect present owners to be reluctant to sell their farms contingently, especially when they realize that if they sell their farms now they will not share in the rise in values. In addition, the state would be compelled actually to handle real estate, a plan that the Wisconsin Committee does not recommend. California did follow such a plan and became involved in the subsequent headaches of long-time credit arrangements and debt litigations. In fact, California's experience was so unfortunate in this field that a state committee recommended that the state never again undertake such a scheme.[11]

The question is, then, how can we control the price of land? Three suggestions are widely current: (1) a limitation on the extension of credit for land purchases, loans being restricted to fifty per cent of the value of the land; (2) higher taxes on land transfers and on capital gains to discourage purchases and sales for speculative purposes; (3) requirement of permits to buy land in order to enforce possible farm land value ceilings and credit controls and to prevent purchases of farms by non-farmers.[12] These are, at best, negative measures and it is doubtful whether they could be legalized. All three proposals would be difficult to administer, but it is questionable whether other public controls would be even as satisfactory as these. It might be that a more feasible approach would be to arouse public opinion through educational means to the realization that no one can profit in the end, neither the buyer nor the seller of land at inflated prices. In any case, the method to be employed has to be instituted immediately.

The second problem is that of interest payments, credits, and loans. Some of the failure in the various settlement schemes that were formulated and put into effect can be adjudicated to the inflexibility of our old classical concept of interest rates and principal payments, plus the fact that money considered as one of the factors of production received more than its share of the profit. For this reason it might be that a flexible system of interest rates could be evolved, starting out with relatively low rates, say 1½ per cent, and over a long-term period be raised to a maximum of 5 per cent; or we might have a stable interest rate at a reasonably low rate of 2½ or 3 per cent.

Very often in the past too much credit has been given with too little security. In addition, the settler found that he was asked to meet both principal and interest payments during times of depression and drought, a thing which he was unable to do. This caused many of them to become failures and forced them to move from the land. It is suggested that less money be given on more security and that the settler be given earned credit for improvements to his land and buildings. He should be asked to make at least a small initial cash payment in order that it might cultivate more responsibility on his part to meet the terms of any agreement that he might make with the second party. Possibly he should be asked to make a 10 per cent down-payment in cash and be given a conditional loan partially repayable, amortized over a relatively long period

[11] Roy J. Smith, *op. cit.*, p. 468.

[12] *Economic Information for Wisconsin Farmers*, Wisconsin Agr. Expt. Sta. Bul. 8, Madison, Wisconsin, 1941.

at an expendable or at least a low rate of interest.[13]

Regarding the question of deferred principal payments and even interest payments, it seems quite feasible to allow the settler to make his payments on a deferred basis. It might be that he would be asked to make no payments, either interest or principal, during the first five or six years and that, in cases of drought, crop failure, and low prices, some sort of a flexible payment scheme could be instituted.

The third problem, that of settler selection, deserves special attention. In the past, failure to be restrictive enough was considered a reason for a number of failures in various soldier settlement schemes. An article written in 1926 has this to say about abandonment of soldier farms in Canada:

" . . . The causes for abandonment are numerous and include death, bad health, and other causes beyond control. A good number result from the re-appearance of disabilities, the results of war service. It would, however, appear that a number of cases of abandonment may be ascribed to *lack of aptitude, instability of character or temperament either on the part of the soldier settler or his wife.*"[14] [Italics added].

Previous settlement experience leads us to make certain suggestions. There is a definite need for our soldier settlers to be selected on a restrictive basis in which experience, adaptability, physical capability, and training are the important factors to be considered. It is especially important that the prospective settler have a genuine desire to farm and not—as the handbook, *The Veterans' Land Act, 1942,* (Canada) warns—regard land settlement as something "merely to take a whirl at." Community or area need for a certain type of settler should be considered. There is no point in forcing a settler down a community's throat nor, conversely, a community down the settler's throat. The social aspects such as nationality and religion should be considered in relation to both the prospective settler and a particular community, especially if there could be any potential social friction.

Finally, there seems to be no substitute for actual dirt-farming experience. Agricultural schools, extension courses, and colleges can help, but they can not in themselves make every soldier settler a successful farmer. Canada has recognized the importance of this and has recommended that no veteran be allowed to qualify for the benefits of their present program unless he has had at least two years' satisfactory farming experience prior to the date of his application.[15]

The fourth problem is the question of the type of settlement that should take place. Any replacement of present farmers will in most cases require settlement based on infiltration rather than on close or group settlement. Previous settlement experience leads one to believe that group settlement is less desirable than scattered or infiltrated settlement in spite of certain administrative advantages. One of the greatest disadvantages of group settlement is the incurrence of unnecessary costs to provide public services which usually exist in other established areas having room for infiltration settlement. Another disadvantage is the danger of a pressure group being formed because of similar grievances. As was too often the case in the past, group action has been brought against the authorities for a mitigation or dissolution of legally and morally contracted debts.[16] If we must have new settlement, it seems more feasible and advantageous to have scattered or individual placement rather than group settlement.

Our fifth problem deals with the question of selection of farms for our returning veterans. Again, if we are to glean something from previous settlement schemes, there is ample evidence that many soldier settlers were placed on, or themselves selected poor farms. Probably the greatest single factor that contributed to the over-all failure of the California venture was the selection of poor tracts of land.[17] All remedial factors were of no avail. In fact, those who borrowed a minimum fared no better and no worse than those who borrowed a maximum.

Low interest rates, flexible payments of both principal and interest, careful settler selection, and liberal credit mean little or nothing if a particular farm is of such poor

[13] Canada: *An Act to Assist War Veterans to Settle Upon the Land;* Passed by the Canadian Government, August, 1942, George VI, Chapter 33.

[14] "Land Settlement in Canada," *International Review of Agricultural Economics,* January-March, 1926, pp. 16-21.

[15] *The Veterans' Land Act* (Canada), Regulations, December 8, 1942.

[16] Roy J. Smith, *op. cit.,* p. 481.

[17] *Ibid.,* p. 489.

quality that farming itself is a hazardous venture. The veteran in most cases will have experienced enough of the vissitudes of life without wishing to continue in such a state of affairs when he returns to a normal occupation.

The Wisconsin Report points out that some veterans will be attracted to part-time farms, garden farms, or other similar places. The greatest danger involved here is in the fact that a veteran can become dependent for his livelihood upon an economic unit which is unable to satisfy such a condition. Careful planning will be required to guard against such a predicament. Canada has recognized this danger, and has conditioned its grant to those interested in a small holding by stating that the veteran must be certified as having steady employment or the definite prospect of such employment.[18]

Other factors in addition to soil and location are important in the selection of a farm. Some effort should be made to coordinate the previously acquired experience of the prospective settler with the particular crop area in which he wishes to settle. Above all, the veteran should be informed of the physical advantages and disadvantages of the particular farm he has in mind. This will require a complete inventory of the farm, its soil type, its topography, its location in terms of market and community services, its previous crop history, and its probable maximum output in terms of its capitalized productive value.

Our sixth problem is usually taken for granted; namely, supervision of the settlement plan both administratively and in terms of individual farms. The Wisconsin Report specifically details the fields of supervision, and they seem adequate if carried out. Much of the lack of supervision in previous settlement schemes has been in not helping the settler buy farm equipment, plan his crops and market them, and arrange for adequate credit facilities. It should be specifically stated that the public is willing to assume certain supervisory responsibilities toward the settler. Required managerial aid should be given and there should be an adequate follow-up program after the veteran is settled. Aid and supervision should be given in crop selection and rotation needs, marketing, and selection and purchase of the necessary farm equipment.

A seventh problem is that of a coordinated state and federal plan for granting financial aid to the returning veterans. Since at the present time the federal government has no definite program recognized as law, the states are definitely handicapped in making specific suggestions as to grants, loans, and credit. It is urgent that the federal government form a definite policy regarding the settlement of veterans on land, particularly as to the amount and type of financial aid it is willing to give. It is suggested that the federal policy should be flexible enough to work conjointly with any state program.

The eighth problem is the tenant-owner dilemma. It is not so much a question of whether the veteran wants to be a tenant or an owner but, much more important, whether he wants to be a tenant or a heavily-indebted owner. Some veterans, when presented with the facts in this manner, would much rather attempt to climb the agricultural ladder and earn an adequate livelihood while doing so rather than attempt to become an owner in a relatively short time and become enmeshed in the many obstacles that are inherent in such a hazardous undertaking. The state could give aid in selecting the tenant farms and could certainly advise what a fair financial agreement would be with the particular owners. It would seem that each case would have to be weighed on its own merits and that no over-all rules of tenant-owner relationships could be drawn up.

The ninth and final problem has been entirely overlooked in all soldier settlement schemes, both past and present. The communities themselves and the returning veterans must plan for certain readjustments if the veteran is successful in returning to agriculture.[19] Three or four years of army life will leave an indelible mark on the veteran and will return him to his community an older and different person than he was when he went away. Some communities have taken stock of themselves and have formed post-war councils which have as one of their jobs the readjustment of the returning veteran. There is no reason why all agricultural communities shouldn't have these councils. Thus, they could plan in a conscientious way for the return of their

[18] *The Veterans' Land Act, 1942*, Handbook No. 1, p. 9.

[19] Robert England, *op. cit.*, ch. XVIII.

veterans. Above all else, the council could be a clearing house for veteran information and could perform a number of important functions. It could act as a liaison between the veteran and his community, helping him make psychological and sociological readjustments. It could help him find a farm through the state offices, and could give him, more than anything else, encouragement after he does settle on a farm. A veteran may have a suitable farm, adequate credit, excellent supervision, and the other advantages discussed in this paper; but, in spite of all this assistance, he may still be a failure unless he is able to make the social adjustments to his community. The community can, if it will, cushion the shocks and give a helping hand both socially and economically. Much that it does can easily mean the difference between success and failure for the returning veteran.

In summary, we have discussed the Wisconsin Report which deals with veteran readjustment in agriculture as well as, in a limited sense, soldier settlement plans both past and present. We have pointed up some problems that are inherent in any scheme which might be instituted. To be sure, there are other problems which must be faced by any group that participates in soldier settlement. Only what has seemed to be the most important ones have been covered here.

Finally, a word of caution is put to our policy makers and program planners. This writer has urged caution and has questioned whether there is actually an agricultural need for settling veterans in the industry except for a limited amount of replacement. If we add, as some would do, that it is inevitable that the veterans settle on the land then that is a policy and must be accepted as such. To admit a policy immediately necessitates a well-planned program. To admit a policy of settling every veteran and war-worker in agriculture will in all probability involve a program so expansive and over-ambitious that no one will want to assume its social and economic costs. It would be sheer folly.

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Public Utility Financing in the Second Quarter of 1944

PUBLIC utility security offerings in the second quarter of 1944 totaled $100 millions. The volume of financing in the current quarter is about equal to the comparable quarter's volume a year ago, but is less than the amount reported for the first quarter of 1944 ($228 millions). The cumulative volume for the first quarter of 1944 ($328 millions) is over twice the volume of financing reported for the first half of 1943 ($126 millions).

There were 6 publicly offered long-term debt issues floated in this quarter totaling $65,500,000. The weighted average offering yield was 2.85%, the net cost to company was 2.92%, while underwriters' commissions averaged 1.00% and estimated incidental expenses .88%. There was only one privately sold issue floated in the second quarter of 1944; this was the $20,000,000 issue of the Peoples Gas Light and Coke Company's First and Refunding Mortgage 3% bonds due in 1961 which were sold at 100% of par to yield 3%. In addition to the long-term bond issues mentioned above there was a serial issue of the Dallas Ry. and Terminal Company's First Mortgage, 1½%-4%, due 1945 to 1959, priced at 100 to 102.54.

The volume of preferred stock issued in this quarter continues the upward trend which began in the fourth quarter of 1943. There are 5 issues, shown in Table II, totaling $11,260,000 and the weighted average price was $101.26 while the weighted average offering yield was 4.12%. Two issues were floated to yield less than 4%; these were gotten out by the Atlantic City Electric Co. and the New Jersey Power and Light Co.

It is notable that 3 of the 8 preferred stock issues floated in the first half of 1944 were offered to yield less than 4.00%. In 1941 the last year in which any appreciable volume of preferred stock financing was floated there

TABLE I. SUMMARY AND ANALYSIS OF PUBLIC UTILITY LONG-TERM DEBT ISSUES OFFERED PUBLICLY, SECOND QUARTER, 1944

Company & Issue (A)	Coupon Rate (B)	Principal Amount (C)	Maturity Date (D)	Month of Offering (E)	Offering Price (F)	Offering Yield (G)	Underwriters' Commissions (H)	Proceeds to Company (I)	Estimated Incidental Expenses (J)	Net Proceeds (K)	Cost to Company (L)
	%	$			%	%	%	%	%	%	%
Arizona Edison Co., Inc. First Mortgage	3½	2,500,000	1974	April	105.75	3.33	1.25	104.25	2.00	102.25	3.39
Louisiana Power & Light Co. First Mortgage	3	17,000,000	1974	April	103.00	2.85	1.09	101.90	0.65	101.25	2.98
Kansas-Nebraska Natural Gas Co., Inc. First Mortgage	4	1,500,000	1959	May	107.00	3.40	2.00	105.00	*	*	*
New Jersey Power & Light Co. First Mortgage	3	9,000,000	1974	May	104.62	2.76	0.93	103.70	1.25	102.45	2.88
Virginia Electric & Power Co. First & Ref. Mortgage	3	23,000,000	1974	May	103.25	2.84	0.95	102.30	0.91	101.39	2.90
West Penn. Power Co. First Mortgage	3	12,500,000	1974	May	104.50	2.78	0.85	103.65	0.65	103.00	2.85
Total or Weighted Average	.....	65,500,000	.....	.....	103.38	2.85	1.00	102.77	0.88[1]	101.85[1]	2.92[1]

* Data not available.
[1] Weighted average excluding the one issue for which data is not available.

TABLE II. SUMMARY AND ANALYSIS OF PREFERRED STOCK ISSUES OFFERED, SECOND QUARTER, 1944

Company & Issue (A)	Dividend (B)	Principal Amount (C)	Month of Offering (D)	Offering Price (E)	Offering Yield (F)
		$		$	%
Arizona Edison Co., Inc. Cum. Pfd., No Par	$5.00	450,000	April	100.00	5.00
Atlantic City Electric Co. Cum. Pfd., $100 Par	4%	5,500,000	April	102.50	3.90
Illinois Commercial Telephone Co. Cum. Pfd., No Par	$4.75	2,100,000	April	100.00	4.75
Kansas-Nebraska Natural Gas Co., Inc. Cum. Pfd., No Par	$5.00	210,000	May	105.00	4.76
New Jersey Power & Light Co. Cum. Pfd., $100 Par	4%	3,000,000	May	101.50	3.94
Total or Weighted Average	.....	11,260,000	.....	101.26	4.12

were 23 issues and none were sold to yield less than 4.00%. The lowest yield recorded in 1941 was 4.12% and the average for the year was 4.69%. The lowest yield in the first half of 1944 was 3.90% and the average was 4.18%. There is an indicated saving of from one quarter to one half of one per cent in the cost of preferred stock capital when 1941 and 1944 yields are compared.

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Book Reviews

The Economics of the Pacific Coast Petroleum Industry, Part I: Market Structure. By Joe S. Bain. Berkeley, California: University of California Press, 1944. pp. xiii, 221. $2.75.

This significant study is the first of three parts, the second and third of which are to appear later. Part I is devoted to the structures of the California petroleum industry; Part II, now near completion, will deal with "the analysis of the character of competition and the nature of the prices and other market results which have arisen from this competition in recent years"; and Part III "will consider the impact of observed price and market results upon the public welfare, and the merits of past and the desirable shape of future public policy toward the industry."

In the present volume, Part I, the author analyzes the structure of the successive markets for petroleum and its products—the crude markets, the refinery wholesale markets, the local wholesale markets, and the retail markets—and he briefly discusses transportation facilities, including pipe lines. He finds a wide variety of market situations, with oligopoly and oligopsony common yet with strong competitive elements in some markets and with definitely monopolistic elements in others; while the entire market situation is of course strongly affected by proration agreements, carried out by the oil interests themselves but under federal auspices.

Professor Bain's study is quite original in its approach. It is not only an economic study of the oil industry—a very excellent study, as far as Part I goes—but it is a study in applied economic theory. Everywhere the author views his problems with the eyes of an economic theorist and the result should be to throw light on the practical applicability of some of our theories. From a reading of Part I alone, the reviewer gained a strong impression that economic theory (which so many students find too difficult for comprehension) although fundamentally significant, is too simple to cover all that goes on in the economic world. Actual market situations, as outlined by Professor Bain, involve extraordinary complications and call for greater refinement of our theoretical analysis than we have yet reached and yet price analysis seems to offer the best key to such situations. Parts II and III of Professor Bain's study is awaited with interest by this reviewer.

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Woodland Opportunities on Dairy Farms in New York. By Hugh A. Johnson, Irving F. Fellows, Donald Rush, C. R. Lockard and C. Edward Behre. Washington, D. C., Charles Lathrop Pack Forestry Foundation, 1944. pp. 35.

There is no dearth of publications on the problems of farm forestry. These materials commonly are characterized by one or the other of two weaknesses, however. One is a tendency to discuss farm woodlands as though they were large commercial forests, to which should be applied much the same management techniques as would be appropriate in the case of 20,000-acre timber properties. The other weakness is the propensity to enthuse over the economic possibilities of farm forestry to a degree unwarranted by hard realities. Neither of these defects is present in this study of central New York woodlands.

Quoting from the foreword of the publication:

"This pamphlet presents in abbreviated form, with illustrations, and with special emphasis on the woodland enterprise, the results of a farm management study conducted by the Bureau of Agricultural Economics in cooperation with the Forest Service, in Otsego County, N. Y. It deals with the same material as 'Woodland Opportunities in Farm Organization in Otsego County, New York,' by Fellows, Johnson, Rush and Lockard, distributed in mimeographed form by the Bureau of Agricultural Economics, March 1943."

Otsego County, New York, is an ideal locale for an intensive study of the farm enterprise, with special reference to the woodland

factor. The soil is fair to poor, and land use is roughly equal as among crops, pastures and woods. Farm incomes and the rural standard of living are not high, on the average, but neither are they so low as to make Otsego County a "problem area" in the same sense as the northern Lake States cutover areas and the Southern Appalachian highlands. Transportation facilities and market outlets are adequate. The farm population is generally industrious, thrifty, and intelligent. The woodlands show much neglect and abuse, but not devastation, and the young growth now present is quantitatively adequate for continued production of timber products. Finally, and most importantly, there is present in the area a farm forest co-op, the Otsego Forest Products Cooperative Association, which owns and operates a modern sawmill at Cooperstown.

The authors conclude that the opportunities for larger income from Otsego County farm woodlands are substantial, but by no means unlimited. These opportunities can and should be realized by the farmers, *as farmers*. Work in the woods can and should be integrated into the year-long routine of farm activities without neglect or sacrifice of dairying or other farm operations. The "what, how, and when" of increased woodland productivity are described, but not in excessive detail.

Incident to this study, the authors made intensive investigations of the current operations of ninety representative farms in Otsego County. With the background of first-hand knowledge thus obtained, they have been able to discuss local problems with concreteness and confidence. The result is a bulletin of exceptional interest and value to persons concerned with land use and farm management in farm-forest regions. The conclusions and recommendations are directed specifically to the Otsego County situation, but the methods of analysis are widely applicable. This report is particularly encouraging as evidence that farm management specialists and foresters can and have worked and thought together, spoken the same language, and arrived at a single goal, without any sacrifice of the traditional objectives of either.

The pamphlet has an attractive format and is enlivened with numerous excellent photographs. The Charles Lathrop Pack Forestry Foundation is to be thanked for making the results of this study available at this time in popular form.

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Food, War and the Future. By E. Parmelee Prentice. New York: Harper & Brothers, 1944. pp. 159, $2.50.

It is the author's thesis that to a world which at the end of the 18th century was short of food and many other supplies the 19th century brought machinery and abundance. The 20th century, he holds, brings no such happy gifts, for population has grown and abundance is nearing its end. Hereafter, whatever we can get by improvement of present agricultural or mechanical methods must be subject to the law of diminishing returns.

The control of population growth is the main solution offered by the author. "Troubles which come from over-population and want—unemployment, decreased earnings, political disturbances, changes in form of government, distribution, pestilence and war—can be cured only by reductions in numbers and increased efficiency of production."

The Beveridge plan he calls a temporary expedience. "In the Beveridge plan excellence has no incentive, failure no terror and inconspicuous mediocrity is safe."

Of particular interest to workers in agricultural colleges and experiment stations will be chapter III. These institutions, the author states, are among our most expensive luxuries. "The entire system of administration of agricultural colleges and experiment stations needs examination. There should be a higher standard of interest, knowledge and teaching ability on the part of instructors. Fewer persons should be employed and more and better work done with a degree of thoroughness yet unknown."

It was on the author's farm that the Mount Hope index for determining the transmitting ability of bulls was developed.

It is the opinion of the reviewer that, while there may be some element of truth in his

statements, his accusations are far too sweeping: that in emphasizing the shortcomings he has overlooked the many accomplishments. Chapter IV is a plea for a continuation of the type of democracy as it has been known in America.

The author, a lawyer by profession, has been writing in the field of agriculture for the past ten years.

J. I. FALCONER.

Ohio State University.

Pan American Economics. By Paul R. Olson and C. Addison Hickman. New York: John Wiley & Sons, Inc., 1943. pp. 479, $3.50.

The authors state in the Preface: "The purpose of this book is to explore the economic life of Latin America, especially as the economic structures of this vast area are outwardly oriented . . . Special emphasis is also placed upon the economic relationships between Latin America and the United States." This would seem to justify the heavy emphasis upon trade, foreign investments in Latin America, and commercial policy, to which the volume is almost entirely devoted. These topics are covered with considerable thoroughness, though primarily by means of description and presentation of statistical data, which makes for tiresome reading.

Yet the preface also states that "in order to study the economies of the various countries, it is essential that a host of nominally domestic matters should be analyzed." In this respect the book is inadequate, chiefly because it looks at Latin America from the outside. Thus, to the vitally important topic of economic nationalism, one-and-a-half pages are devoted, while land tenure—another subject of great significance—receives but two pages of discussion. Nowhere is there an analysis of the chronic budgetary difficulties of most Latin American countries, of the recurring problem of inflation, or of standards of living. Conspicuously lacking also is any historical background, without which it is difficult to understand the present economic status of the countries below the Rio Grande.

Though the authors by no means fall into the error of treating Latin America as a homogeneous area, adherence to the (circumscribed) topical approach has the result that the characteristics of the different countries are presented in piecemeal fashion. The student is therefore unlikely to obtain a rounded understanding of "the economies of the various countries." Without such understanding, he can hardly be regarded as having achieved a grasp of the subject of "Pan American Economics." For this purpose, it would surely have been better to have examined in some detail the economic, geographic, and other relevant characteristics of each country or homogeneous region, perhaps covering the external economic relations of Latin America as a whole in separate chapters devoted to trade, investment, and commercial policy.

In spite of its defects, this book represents a worthy first attempt to deal with the subject of Latin American economics. The large amount of information it provides in the limited field covered should make it a useful aid in the teaching of this subject, though it is scarcely adequate as a basic text.

P. T. ELLSWORTH

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Free China's New Deal. By Hubert Freyn. New York: Macmillan Co., 1943. pp. xviii, 277. $2.50.

This book represents a hurried review of the Chinese economy. The first part is organized on a topical basis: agriculture, mining, industry, transportation, finance, land problems, prices, and political organization. The second part is based on a series of discussions of a number of the provinces. The book is in no sense a studied analysis of Chinese problems. it is intended only as a popular summary of descriptive secondary information.

M. E. A.

Food Enough. By John D. Black. Lancaster, Penn.: The Jaques Cattell Press, 1943. pp. 269. $2.50.

Food Enough is a popular treatise dealing with the food situation during the war and

postwar periods. It is a timely book and has already served a useful purpose in helping to acquaint the public with essential facts on the food situation at home and abroad.

The basic information contained in this book was apparently obtained mainly from four alphabetical agencies in Washington, namely, B.A.E., W.F.A., O.F.A.R., and O.P.A. The viewpoint and conclusions as far as the war period is concerned also appear to be shared by these administrative agencies and their planners. It is, in fact, to the economists in these offices that the book is dedicated.

The author's contribution appears to be primarily in his overall treatment of the subject, in sifting out the pertinent facts and piecing these together in an interesting and logical manner.

The first six chapters are used to present the general food problem among our civilians, our armed forces, our allies and our enemies. Chapters seven to nine describe the relationship of manpower, machines and materials to food production. The next three chapters describe the kinds of food we need, what we can produce and what we can afford. Chapters thirteen and fourteen deal with shifts in production and consumption. These are followed by chapters on price controls, rationing and marketing. The last four chapters deal with food after the war, although only the last one is so named. The other three are labeled "Food, Relief and Rehabilitation," "Freedom From Hunger," and "Food International." These constitute a brief review of the United Nations' Food Conference held at Hot Springs, Virginia. All of the chapter headings reflect the popular presentation which the author gives the subject.

The reviewer finds little with which to differ in the general description of the food problem and with the discussion of the probable supplies of food during the war period. The sane and factual description of the war food situation in Europe is refreshing in contrast with the over-dramatization of the problem in many newspapers and magazines. On the other hand, the reviewer does not share the optimism reflected in the last chapter with respect to the postwar price situation facing American farmers. In this chapter the author forecasts for consumers a bountiful supply of food at moderate cost and at the same time predicts for farmers a healthy market at good prices. The facts which Dr. Black has presented earlier in the book seem to support the first prediction much more strongly than they do the second one.

The problems in agriculture which are likely to arise after the war appear to be numerous and difficult, even without considering the possibility of at least thirty million acres being improved by irrigation, drainage or clearing and an increased use of commercial fertilizers (p. 254).

Let us hope, however, that Dr. Black is correct in his prophecy of a glorious future for both consumers and American farmers.

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